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ROYAL COMMISSION ON COAL

Edmonton, Alta., April 16, 1945.

VOLUME XXVII

WITNESSES

Hon. N. E. Tanner and W. J. Dick - Pages 2320 - 2423.

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LIST OF EXHIBITS

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ROYAL COMMISSION ON COAL

Edmonton, Alta.,  
April 16, 1945.

The Royal Commission on Coal convened at the Court House, Edmonton, Alta., on Monday morning, April 16, 1945, at 11 o'clock.

## PRESENT:

Hon. Mr. Justice W. F. Carroll, Chairman  
Hon. Mr. Justice C. C. McLaurin, Commissioner  
Angus J. Morrison, Esq., Commissioner  
J. J. Frawley, Commission Counsel  
R. D. Howland, Secretary.

BY MR. FRAWLEY: Mr. Chairman, the first brief to be submitted this morning will be the brief of the Government of the Province of Alberta. Hon. N. E. Tanner, Minister of Lands and Mines, will present that brief and Mr. W. J. Dick of Edmonton will be associated in the presentation of it.

HON. N. E. TANNER examined by Mr. Frawley.

Q You are the Minister of Lands and Mines for the Province of Alberta?

A Yes.

Q And you are here today to present the brief of the Province of Alberta to the Commission?

A Yes.

Q Would you please put the brief on the record?

Exhibit 136 - Submission of the Province of Alberta





HON. N. E. TANNER: Mr. Chairman and Commissioners, before reading this brief I should like to state that in the preparation of it we have had the help of Dr. Allan, Professor Pritchard, Professor Stewart, Professor Stansfield, of the University, Mr. W. J. Dick, and these men will be prepared to discuss any technical questions regarding the parts they have prepared, and with your permission I will ask Mr. Dick to read part of this brief. It will be less tiresome to you and to me. I will read first, and Mr. Dick will read parts also. (Proceeds to read Exhibit 136):

Just a year ago tomorrow, the Alberta Coal Committee presented a Brief to the Dominion Government setting out in a concise manner the problems affecting the coal industry, a copy of which has been presented to your Commission.

The Committee preparing this Brief was made up of representatives of the industry, the miners and the Provincial Government. This was the first time that such united action has ever been taken in the interests of the industry, and was evidence of the importance placed on it by all concerned.

At the time our Brief was being prepared, we were advised that a Royal Commission would be set up to consider all matters pertaining to the coal industry. We welcomed this information, and are pleased that the Commission has been set up as now constituted.

We appreciate this opportunity of presenting the views of the Alberta Government to your Commission, and we wish to assure you of our closest co-operation and assistance wherever possible.

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#### GENERAL THESIS

The general thesis of this brief is as follows:-

That a prosperous coal industry in Alberta is essential for a prosperous Alberta.

That a prosperous coal industry in Canada, and a prosperous Alberta, are essential for a prosperous Canada.

That the welfare of the Alberta coal industry and of the Canadian coal industry are so interrelated as to be essentially the same problem.

That Alberta has proven deposits of mineable coal ample to supply for hundreds of years all requirements for Canada of coal for domestic, industrial and railway use, as well as of coal to replace gas and oil as these resources become depleted, and of coal as raw material for new chemical industries.

That Canada has coal deposits in Nova Scotia, New Brunswick, Ontario, Saskatchewan and British Columbia, as well as in Alberta, and yet in normal times imports more than half its consumption of coal.

That the dominant problem in the supply of Canadian coal for Canadian needs is the long distances, and consequent excessive freight rates, separating the coal fields from the main areas of coal consumption. This handicap is particularly



applicable to Alberta coal.

That types and qualities of Canadian coal are not major features in the situation. Not only are many coals available, satisfactory as mined to suit most requirements; but technical processes are available, although some only in the development stage, to upgrade low rank coal, to convert one type of coal into another, to convert coal into gas and oil, and, in general, to supply all markets from available coals.

That the coal industry of Canada requires organization.

That organization of the industry, by eliminating cut-throat competition, overlapping activities and needless duplication of equipment, by regulation of sales and of markets, and by general systematization, will reduce the cost of coal and thus increase the area of accessible markets for each coal field.

That, in addition to the economies due to organization, reduced and stabilized freight rates, and long term subventions, will be necessary to the achievement of the supply of Canadian needs by Canadian coals.

That further geological surveys should be made, and that a far wider and more aggressive programme of investigation and research should be initiated.

That standardization of coal by size and quality is desirable, and, that a consistent programme of education for coal miners and coal operators should be arranged.

#### HISTORY OF ALBERTA COAL

Although Alexander Mackenzie first discovered large deposits of coal on the lower Mackenzie River in 1789 and Edward Umfreville discovered a "float" on the Saskatchewan River eastward from the Alberta boundary in 1786, to Peter Fidler must go the credit for finding the first coal deposits in the territory now known as The Province of Alberta. Fidler discovered coal in the Drumheller district on Rosebud Creek in 1791.





Alexander Mackenzie discovered large deposits of coal in the Peace River Block in May 1793 and, according to Dr. J. A. Allan, this was the first mention of anthracite in this territory. Mackenzie's notes indicate that he was highly impressed with the tremendous size of the deposits which he discovered, particularly in the lower Mackenzie River district where he found that the whole river bank was on fire for a considerable distance.

David Thompson was the first explorer to record the occurrence of coal in the Edmonton district in 1800 and the Saunders Creek deposits were reported first in 1810 by Alexander Henry Jr.

Sir George Simpson who first recorded the presence of gold in Alberta, discussed at some length the coal of the Edmonton district and, stating in 1841 that it was being used by blacksmiths, reported that it was as good as any other blacksmith coal obtained from mines either in eastern Canada or in the United States.

A general statement covering discoveries in the foothill regions of Alberta indicates that coal was first located, possibly in the Canmore-Bankhead district, in 1845.

Sir James Hector, travelling with the Palliser expedition reported on coal seams on the Athabaska and Pembina Rivers. The location of these discoveries coincide pretty well with the site of the present mines operating in these localities.

Dr. George M. Dawson came to the west in 1865 to make the first exploration along the international boundary line. He reported in that year that great coal seams existed in the treeless areas and published a map which had considerable influence in effecting a change in the general sentiment of eastern Canada toward the western prairies.

Nicholas Sheran opened the first coal-mine in Alberta on the banks of the Old Man River near Lethbridge in 1872 and hauled coal from there to Fort Benton, Montana, by ox train for a number of years.





Northern Alberta was explored in 1885 and 1886 by J. B. Tyrrell. This exploration included the Edmonton district and resulted in the marking of a number of coal seams which he discovered along the rivers.

During the construction of the Canadian Pacific Railway in the vicinity of the Rocky Mountains, coal was being hauled from the United States. In 1881 the first coal seam was opened in the Lethbridge district, the product from this particular mine being hauled to Medicine Hat. It was used in locomotives and found to be so satisfactory that a narrow gauge railway was built to Lethbridge and a mine opened in that area.

The next year, 1882, and also in 1883, coal mines were opened at Anthracite and Canmore. The product of these mines was used in the heavy construction work of the railway through the mountains. It has been stated that if the prairie and foothills of Alberta had not been successful in supplying considerable coal for locomotives that much of the railway construction work in the mountains would have been delayed considerably. The Crowsnest mines were opened about 1898.

Following these events, and as a result of the importance attached to Alberta's coal reserves, a certain amount of detail work was carried out by the Federal Geological Survey. Stratigraphical information was obtained throughout Alberta as a result, and the distribution of many coal bearing formations was marked as accurately as the geological knowledge of that time would warrant.

Development of the coal producing areas on the railway from Bickerdike to Cadomin, Luscar, Mountain Park and Sterco followed the construction of the former Grand Trunk Pacific line into the Yellowhead Pass in 1911 and 1912 and extended over a number of years. The Nordegg field was opened with the construction of the former Canadian Northern line about 1913.

The first experimental shipment of Alberta coal to Ontario was made in 1923 and was followed by others in 1925



and 1926, the three shipments having been made in arrangement with Hon. Howard Ferguson, then premier of Ontario. No subventions were paid on these shipments and freight rates were charged on an experimental basis without prejudice and only for a specific tonnage.

The following portions of this brief deal explicitly with conditions and circumstances in the coal mining industry of Alberta since that time.

#### COAL CLASSIFICATION

Exact classification of coal in Canada may be said to date from the publication in 1939 of Report No. 814 of the National Research Council. The classification then promulgated was that of the American Society for Testing Materials - Specification D388-38.

An earlier classification, without any defined boundaries, existed in Alberta and is still in common use. It is also used in the statistics given in the Annual reports of the Provincial Mines Branch.

For the purpose of the present brief, however, it has been thought better to divide the coals of Alberta into five broad groups, each containing coals of the same general character and used for the same purposes, as shown in Report 35 of the Research Council of Alberta, on pages 19 and 20. The following table gives all three methods of subdivision and indicates the extent to which they agree, disagree and overlap.





Five Groups - Characteristics and Analyses

Group I. Low volatile, non-coking coal from mountain areas. Commonly called steam coal.

A good storage, weather resistant coal. Burns with a short, slightly smoky flame. Used for railways and for steam raising in general. This coal, when briquetted, is also used for domestic heating.

Important areas where this coal is mined are: Cascade, Highwood, Nordegg.

Group II: High volatile, coking bituminous coal from mountain areas. Also commonly called steam coal.

A good storage, weather resistant coal. Burns with a medium to long, smoky flame. Used for railways and for steam raising in general. Also used for making coke, as smithy coal, and in the cement industry.

Important areas of this group are: Crowsnest and Mountain Park.

Group III: High volatile, non-coking coal, principally from foothills areas.

A good storage, weather resistant coal. It is a free-burning, non-coking coal that burns with a long, slightly smoky flame. Used for domestic and for steam raising purposes. It is a strong coal and can be shipped and stored reasonably well.

Important areas of this group are: Coalspur, Lethbridge, Prairie Creek, Saunders.

Group IV: A so-called domestic coal, fair storage, from prairie areas.

Can be stored, with care, under cover. It is a free-burning, non-coking coal, that ignites easily and burns with a long, smokeless flame. Used for domestic heating and also for steam raising. It can be shipped in box cars.

Important areas of this group are: Carbon, Drumheller, Edmonton, Pembina, Taber.





Group V: A so-called domestic coal, poor storage, from prairie areas.

Will not store well. It is a free-burning, non-coking coal, that ignites easily and burns with a long smokeless flame. Used for domestic heating and also for steam raising. It can be shipped in box cars.

Important areas of this group are: Camrose, Castor, Sheerness, Tofield.

An analysis is given in the following table for each group, but it must be understood that as there is a wide range of coals in each group the analysis given for any group is merely typical and may be far from representative of some coals in the group.

The output for the group in 1943 is also given.

		Group I	Group II	Group III	Group IV	Group V
Moisture	%	1 $\frac{1}{2}$	1 $\frac{1}{2}$	10	19	27
Ash	%	8 $\frac{1}{2}$	12 $\frac{1}{2}$	10	7	7
Volatile Matter	%	15	25	34	30	28
Fixed Carbon	%	75	61	46	44	38
Heat value, B.t.u./ lb.		14,000	13,200	10,900	9,700	8,300
Output in 1943, thousand tons		996	2,486	1,359	2,533	304

#### COAL RESERVES

Coal seams in Alberta have a wide distribution in the Cretaceous formations as shown on the geological map (Plate 2). The coal-bearing beds in Alberta occur in three different horizons. The oldest horizon in the Blairmore-Kootenay formation is Lower Cretaceous in age. The two younger horizons are of Upper Cretaceous age and occur in the Belly River and Edmonton formations. The oldest and most mature coal seams outcrop within the front ranges of the Rocky Mountains and are presently mined at a number of places in the Crowsnest Pass and at Canmore, Nordegg, Mountain Park, Cadomin and Luscar, and more recently are being developed in the Highwood and Sheep Creek valleys. The coal seams in the Belly River and Edmonton horizons outcrop in or occur under the foothills and plains.



The coal seams under the plains are flat-lying or dip at less than five degrees. In the foothills belt the dips increase but are seldom over 20 degrees. Much steeper dips occur in the coal seams within the mountains, and in some places the seams have dips of 90 degrees.

The geology of the coal deposits of Alberta has been discussed in various reports issued by the Research Council of Alberta and by the Geological Survey of Canada. Details on the coal areas are summarized by J. A. Allan in Report 34, Part V, issued by the Research Council of Alberta in 1943, so it will not be necessary to discuss the geology of the coal deposits, except certain geological factors which affect coal production or are related to an estimation of the available coal reserves of Alberta.

Coal is being mined at a number of centres in the plains, foothills and mountains in the southern half of Alberta where the coal seams outcrop or where the coal deposits are more accessible to present transportation facilities. Of course the coal-bearing formations have a much wider distribution than is represented by the present coal mining development. This is an important factor in estimating the coal reserves available for development. There are several areas of considerable extent where the general geology has not been sufficiently interpreted to say that there is or is not mineable coal in those areas.

When the Research Council of Alberta was organized in 1920, it was apparent that a map was needed outlining coal areas based on geological formations. Such a map was needed for the classification of coals according to chemical analyses, and also for the marketing of coal where it is advisable to indicate the district from which the coal has been mined. The latest coal areas map, published in 1943, shows 50 coal areas, including 72,435 square miles, where coal has been mined or where mineable coal is known to occur. The position





of these coal areas is shown on Plate 1. The rank of coal in each area is designated by color to represent the five groups into which Alberta coals are classified.

The two chief factors that determine the rank of the coal are age and pressure. In general it is a fact that the older coals are more mature or "harder" than the younger coals. In Alberta, the Blairmore-Kootenay coals of Lower Cretaceous age are more mature than most of the Belly River or Edmonton coals that are of Upper Cretaceous age. On the other hand, pressure will mature a coal more rapidly. That is why the rank of most Alberta coals increases from east to west, that is, from the plains to the foothills and mountains. For example, a Belly River coal at Wainwright is less mature than a Belly River coal in the foothills area. This explains why the Lethbridge coal is of higher rank than the Redcliff coal, although the coal seams in the two areas are of the same age. The coal seams in the Lethbridge area are closer to the mountains and have been affected to a greater degree by the mountain-building forces, than have the coal seams in the Redcliff area.

The amount of coal, and the thickness and mineability of coal seams within a given area of coal-bearing formation, cannot be determined with any degree of accuracy until the thickness and extent of the coal seams have been proven by test drilling or by actual mining operations. It is therefore only possible to estimate the amount of mineable coal in a given area, from the geological facts obtained from outcrops of coal seams or from coal mines, or from holes drilled at various points in the coal-bearing formation.

It is necessary to understand that coal seams seldom extend laterally for any great distance. Geological investigations indicate that any coal seam in the Cretaceous formations in Alberta will vary in thickness and change in quality of coal within a short distance, often within less than one mile. It is also reasonable to assume that there is



mineable coal underlying many areas that have not yet been opened by mining. Coal seams have been encountered when drilling for oil and natural gas, where there is no outcrop of coal in the vicinity or where the coal seam drilled through is below the horizons in the adjoining outcrops in valleys or ridges. All such geological factors have been considered in estimating the coal reserves.

A clear distinction must be made between coal resources and coal reserves available for development by present mining methods. Coal resources include all known coal deposits based on the extent of coal-bearing formations, but it must be evident that a large percentage of the coal occurs in seams that are not mineable. Any estimate of the coal resources will be much larger than an estimate of the amount of coal that can be classed as mineable. An estimate of the coal reserves, on the other hand, will represent the quantity of coal that may be mineable at present or at some future date, based on the thickness and quality of the coal in the seams in the outcrop or in the mine, or in the bore hole, and also on the geological factors obtainable on the coal-bearing formations. This is the basis on which the estimate of Alberta coal reserves has been made. This estimate of reserves must be considerably smaller than that given for coal resources.

The first complete study of the coal resources of Alberta, based on several years of field investigations by D. B. Dowling, was that made by the Geological Survey of Canada for the International Geological Congress held in Canada in 1913, and the results were published in the Coal Resources of the World, 1912. The estimate on the coal resources of the world made at that date was arbitrarily based on the extent of the coal bearing formations and included all known coal seams one foot or over in thickness, to a vertical depth of 4000 feet. On this arbitrary basis the total coal resources of Alberta has been given at over one million million long tons of mineable coal.





In the past thirty years more extensive geological investigations and mining and drilling operations have increased the geological knowledge of the extent, thickness and quality of the coal seams in the Cretaceous strata in Alberta.

In 1925, Dr. J. A. Aallan, on behalf of the Research Council of Alberta, made an estimate of the actual and probable coal reserves in each of the coal areas, on the basis of coal seams over two feet in thickness to a depth of 1,000 feet. This estimate submitted to the Evans Coal Commission was about 57,000 million short tons. In 1935, before the Barlow Royal Commission, the estimate of coal reserves based on seams three feet or over in thickness under 1,717 square miles, was approximately 40,200 million tons.

In the past ten years the knowledge of the thickness, extent and character of the coal seams in each of the coal-bearing formations has greatly increased.

The present estimate of the coal reserves of Alberta is shown in Tables I and II.



Table II Continued

ESTIMATED ALBERTA COAL RESERVES  
Based on Geological and Mining Data,  
Arranged according to Groups,  
Shown on Plates 4 and 5,  
February 1945.

Formation No.	Name of Area	Total Area sq.mi.	Area un- derlain by coal, sq. mi.	Thick- ness of coal feet	Tons acre foot	Tonnage, millions of tons
<u>Group V</u>						
B11	Pakowki	2,590	41	6	1,800	300
B13	Redcliff	2,015	1	4	1,780	5
B15	Steveville	2,015	3	3	1,780	10
B16	Empress	2,015	1	3	1,780	3
B17	Wainwright	1,080	2	5	1,780	10
B18	Pakan	3,025	2	5	1,780	10
B19	Rochester	1,150	1	6	1,800	7
B20	Sexsmith	1,570	2	5	1,800	10
B23	Westlock	1,705	5	6	1,800	40
B24	Slave	2,375	2	4	1,800	9
B25	High Prairie	3,020	2	4	1,800	9
E3	Tofield	900	20	15	1,760	300
E4	Camrose	865	10	10	1,760	100
E5	Castor	2,880	20	15	1,770	300
E9	Sheerness	1,765	20	10	1,800	200
EL6	Mountain House	940	2	4	1,800	9

Total - 1,322 million tons

Grand Total - 46,562 million tons

BY MR. FRAWLEY: This Table I, that does show that Mr. Allan now estimates it at what, at 2,563 million tons?

HON. MR. TANNER: No, it goes over the page.

BY MR. FRAWLEY: At 46,562 million tons?

HON. MR. TANNER: That's right.

BY MR. FRAWLEY: He has slightly increased the estimate that he gave to the Barlow Commission?

HON. MR. TANNER: Yes. (Continues brief):

These tabulations are also shown graphically on Plates 3, 4 and 5. The estimate is based on known coal seams three feet or over in thickness, occurring within 1,000 feet of the surface and most of the coal is within 500 feet of the surface. Only that coal under each of the coal areas shown on Plate 1 has been included, most of which is available for immediate production. No doubt there is considerable mineable coal in some small areas not included in the present coal areas, but this coal would not change appreciably the figure given for the





available reserves. The known available coal in reserve in 1,974 square miles within the coal areas of Alberta on the basis stated above and shown on Tables I and II, is over forty-six thousand million short tons.

Mining practice has been such that a great tonnage of coal has been left in pillars or abandoned on account of quality or inaccessibility. This tonnage has been lost for future use. Considerable quantities of accessible coal have been lost by the abandonment of mines.

The total production of coal mined in Alberta between 1886 and 1944 was approximately two hundred million tons. This represents 0.43 percent of the estimated available reserves. This means that less than one-half of one percent of the available reserves have been mined in the past 57 years. It is conservative to say that an equal volume of coal has been lost by mining practice, and abandonment of mines. This means that only about one percent of the available coal reserve has been utilized and lost to date. On the basis of present production the known available coal reserve in Alberta is good for about four thousand years. It is evident that Alberta has an ample supply of available coal and there is no danger of depletion of reserves from increased production.

In Table I the estimated available coal reserves are shown in each coal area according to geological formations in which the coal seams occur.

In Table II the estimated coal reserves are subdivided according to the five group-divisions discussed in this brief under the heading "Classification of Alberta Coals". This tabulation is shown graphically on Plates 4 and 5. This classification by groups is more applicable to Alberta coals because coal in seams of a particular age becomes more mature from east to west, that is from the plains toward the Rocky Mountains. The coal under the fifty coal areas as shown on Plates 5 and 6 is classified as follows:



Group I	5 areas	16,100 million tons
Group II	5 areas	13,600 million tons
Group III	10 areas	10,200 million tons
Group IV	14 areas	5,340 million tons
Group V	16 areas	1,322 million tons

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Total	46,562 million tons
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It is quite evident that Alberta has very large reserves of coal in each of five groups available for immediate production. At the same time these large reserves should not lead to wasteful mining methods in the mines now being operated because the coal deposits are now being mined where the coal is most accessible and most cheaply mined, and where the coal is as high in quality as in less accessible undeveloped areas.

#### SUMMARY

##### 1. Revision of Estimates of Coal Resources of Canada

The Dominion figures on the coal resources in the various provinces in Canada are those given in the Coal Resources of the World published in 1912. According to these estimates Alberta contains 15 percent of the coal of the world and 87 percent of the coal in Canada. It is known that these figures on the coal resources of Canada are inaccurate.

A revision of the coal reserves in each of the coal-producing provinces in Canada should be made by the Dominion Government and based on the present knowledge of the coal deposits which is much more detailed than in 1912. The coal reserves in Alberta have been re-estimated by the Research Council of Alberta but until re-estimates are made on a uniform basis in each of the coal-producing provinces for the whole of Canada, it will not be possible to make a correct comparison between one province and another.

##### 2. Geology of Canadian Coal Deposits

Considering the importance of coal in the future industrial development of Canada, there is an urgent need for more detailed geological investigations in many important coal basins and coal-producing areas in Canada. Alberta is particu-





larly in need of geological investigations on the coal deposits in various parts. It is a fact that much data on coal deposits within the Rocky Mountains in Alberta have been collected by the Geological Survey of Canada, but have not been made available by publication. This unpublished material should be made available at once. In addition, it is recommended that more extended surveys should be carried out in Alberta by the Dominion Government. The Alberta Government is prepared to co-operate fully in this work.

BY MR. FRAWLEY: When you say that they have not been made available by publication it is just that they haven't got around to publishing them, I suppose?

HON. MR. TANNER: That's right; they haven't been published. Mr. Dick will read from there on.  
MR. W. J. DICK:

#### MINING OPERATIONS AND COAL PRODUCTION

In presenting a picture of the coal mining industry in Alberta, as depicted in Plate 6, one cannot help seeing reflected a history of the Province and the Nation. The early years of development, the rising production and prices of World War 1, the post-war years, the depression thirties, and again the rising production and prices of World War 2, are all shown in Table 3 and graphically outlined in Plate 7. What is to be recorded in the future will depend greatly on the foresight shown today in planning for a balanced economy in production, employment, wages, etc., not only in coal, but other industries as well.



TABLE NUMBER 3

NUMBER OF MINES IN OPERATION AND  
ANNUAL PRODUCTION OF COAL IN THE PROVINCE OF ALBERTA

The following table is taken from a report prepared by the Dominion Bureau of Statistics and published in the "Coal Statistics for Canada":

Calendar Year	No. of Mines in Operation	Short Tons	Value
1886	.....	43,220	\$ 81,112
1887	.....	74,152	157,577
1888	.....	115,124	183,354
1889	.....	97,564	179,640
1890	.....	128,753	198,298
1891	.....	174,131	437,243
1892	.....	178,970	460,605
1893	.....	230,070	586,260
1894	.....	184,940	473,827
1895	.....	169,885	382,526
1896	.....	209,162	581,832
1897	.....	242,163	630,408
1898	.....	315,088	787,720
1899	.....	309,600	774,000
1900	.....	311,450	778,625
1901	.....	340,275	850,687
1902	.....	402,819	960,601
1903	.....	495,893	1,117,541
1904	.....	661,732	1,404,524
1905	75	931,917	1,993,915
1906	61	1,246,360	2,614,762
1907	82	1,591,579	3,836,286
1908	112	1,685,661	4,127,311
1909	121	1,994,741	4,838,109
1910	154	2,894,469	7,065,736
1911	224	1,511,036	3,979,264
1912	243	3,240,577	8,113,525
1913	289	4,014,755	10,418,941
1914	264	3,683,015	9,350,392
1915	280	3,360,818	8,283,079
1916	279	4,559,054	11,386,577
1917	283	4,736,368	14,153,685
1918	317	5,972,816	20,537,287
1919	276	4,933,660	18,205,205
1920	288	6,907,765	30,186,933
1921	333	5,909,217	27,246,514
1922	379	5,990,911	24,351,913
1923	362	6,854,397	28,018,303
1924	399	5,189,729	18,884,318
1925	380	5,869,031	20,021,484
1926	341	6,503,705	20,886,103
1927	325	6,934,162	21,982,058
1928	284	7,336,330	23,532,414
1929	300	7,150,693	22,928,182
1930	301	5,755,528	18,063,225
1931	316	4,564,015	13,342,675
1932	307	4,870,648	12,307,258
1933	338	4,718,788	13,526,309
1934	320	4,753,810	12,556,099





Table Number 3 continued

Calendar Year	No. of Mines in Operation	Short tons	Value
1935	307	5,462,894	\$14,094,795
1936	305	5,696,960	14,659,705
1937	303	5,562,839	14,565,911
1938	302	5,251,233	13,698,470
1939	294	5,519,208	14,415,281
1940	278	6,203,839	16,377,959
1941	239	6,969,962	19,382,471
1942	204	7,754,053	22,624,410
1943	206	7,676,726	24,030,686
1944	202	7,427,433	26,741,357
Total		203,875,493	\$628,353,287

NOTE: Production quantities and values prior to 1919 refer to sales and colliery consumption. From 1919 to 1944 the mine output figures are given.

On examining Plate 7, valleys in the production curve caused by strikes, are denoted by small figures which give the duration of each, in months. It will be noted that previous to War 1, there was depression from 1913 to 1915, and the next large valley denotes the depression years of the thirties.

Also, it will be noted that the valuation curve follows the output curve fairly well up to 1924, and from there on the valuation falls away from the production curve, showing a drop in the valuation per ton. This is better illustrated in Plate 8, which shows the valuation per ton, in dollars, for the same years.

The rate of increase in the dollar value of coal for the last two years of this war compares closely with the last two years of War 1. Whether or not the increase will continue, will depend on price control.

Alberta is one of the two principal coal producing areas of the Dominion, the other being Nova Scotia. During the past five years, they have produced together, and in about equal proportions, 78% or nearly four-fifths of the coal mined in Canada, other provinces producing the remaining one-fifth. (Table 4).



In 1943 Alberta produced a million and a half tons more coal than Nova Scotia, and nearly 1.7 million more in 1944. With a total Canadian production of between 17 and 18 million tons (Table 4) and a consumption of over 44 million tons in 1943 (Table 5) 28 million tons, largely from the United States, were imported principally from the United States, regardless of the fact that the Canadian mines were not operating full time. To the Dominion Government and those interested in the coal industry, the matter should be of grave concern, requiring not only action now, but the formulation of a clear-cut National policy for the future.

In Sir Montague Barlow's Coal Commission Report of 1935, p. 5, he stated that the two principal problems were "Marketing and Regulation." At that time he classed the finding of adequate markets as an urgent problem demanding the immediate attention of the Government and the industry. After ten years, it still remains an urgent problem, and no nearer solution. Until a satisfactory national coal policy is put into effect measures are taken for its correction, it will remain a problem.

Since the Barlow Report, many regulations have been enacted improving conditions in the mines as to health, safety and working methods in general, but as the enumeration of them here has no bearing on the question of markets, and would only tend to increase the length of this brief, they have been omitted.

However, in passing, reference should be made to the oft-repeated statements in the Barlow Report, to the over-development of coal mining in Alberta, as at the foot of p. 21 of that report.

The Evans' report gave 399 mines in operation for the year 1924 (Table 3). The Barlow Report gave 276 mines in operation for 1934, and The Mines Branch Report for 1944 (unpublished) gave 202 mines in operation for the year, with 180 in operation as at December 31st, 1944.



A glance at Plate 9 shows the number of men employed and the mines in operation for the years 1905 to 1944. It will be noted that the number of mines in operation, has, with small fluctuations, steadily decreased since 1924, to a point about equivalent to the mines in operation during 1910 and 1911. It is interesting to note, that during the earlier years from 1905 to 1924, there is a definite and positive correlation between the number of men employed and the number of mines in operation. From 1924 to 1944 although the trend of the number of men employed is downward, there is an inverse relationship to the number of mines in operation. A decrease in the number of mines accompanies an increase in the men employed and vice versa.

An analysis of the reduction in the number of mines in operation for the years 1927 to 1944 produces some rather interesting results, as shown in Table 6 and Plate 10. From these it will be noted that from 1933 a rapid decline has occurred in the number of small mines producing under 1000 tons annually. Similar and less rapid declines are outlined for mines producing from 1,000 to 10,000 tons and from 10,000 to 100,000 tons annually. These declines occurring from 1937 and 1936 respectively. However, in the case of the larger mines, those producing between 100,000 and 200,000 tons, the number remains about constant, while those producing over this figure have gradually increased since 1932. In other words, the small mines apparently are not able to compete with the larger.

This constant reduction in the number of mines in operation, has been partly brought about by lack of markets, insufficient capital, costs, mechanization and other factors, and partly by the unwritten policy of the Mines Branch to withhold license to operate within an area unless the applicant could show a specific need. Nevertheless, while we are importing so much coal there is no reason why we can not have complete





access to the entire Canadian market and thus keep our mines operating.

Consider the production and importations for consumption, for the past seven years:

Year	Canadian Production of coal Tons	Coal imported for consumption Tons
1938	14,294,718	12,012,634
1939	15,692,698	14,564,679
1940	17,566,884	17,036,090
1941	18,226,921	20,026,082
1942	18,865,030	24,122,916
1943 #	17,859,057	28,852,654
1944 #	17,010,117	28,926,925

From the above, it will be seen that importations have steadily increased and are now more than twice that of 1938, while Canadian production has risen a mere three million tons since that date, declining in the past two years.

Alberta consumes, exclusive of railway coal, only about one and a half million tons of the seven and a half million produced (Table 7) it is therefore a coal exporting province.

How Alberta coal is consumed is graphically shown in Plate 11. Home consumption of Alberta coal, except for the depression years, has remained in the neighborhood of  $1\frac{1}{2}$  million tons. Saskatchewan has consumed about an equal amount of Alberta coal, but during the past few years, the Saskatchewan curve has fallen away from the Alberta curve and will probably continue to do so with increasing production in that Province.

For the past 20 years Manitoba has consumed, with slight fluctuations, about one-half million tons of Alberta coal, and will probably not change appreciably unless conditions change greatly.

On the other hand, British Columbia and Ontario give steadily rising consumption curves for Alberta coal and although the British Columbia curve has risen rapidly since the

#Figures for these two years taken from the Dominion Bureau of Statistics Report for December 1944. The remainder were taken from the Canada Year Book.



outbreak of this war, and with a possible post-war recession, consumption is likely to increase after a period of adjustment. However Ontario shows a small but steadily increasing curve until 1942 and would have undoubtedly increased still further but for the stoppage of shipments ordered in 1943. Because the consumption of this province is great, entry of Alberta coal in substantial quantity would largely stabilize Alberta's coal industry.

In regard to stabilization, there is one other large factor, and that is railroad consumption. In the years 1928 and 1941, the railroads consumed more coal than the Province of Alberta and Saskatchewan combined, while in 1933, they consumed about  $1\frac{1}{2}$  million tons, a little more than the average consumption in Alberta. Such tremendous fluctuations undoubtedly create unstable conditions in the industry. By referring to the production curve in Plate 7 for the same years, a marked similarity is shown between this curve and the curve for railroad consumption. Alberta's main problem now is one of distribution rather than production.

In submitting the case for Alberta, insofar as this section of the brief is concerned, the year 1943 was chosen primarily because it was the latest year for which published and revised figures were available, and that it occupied a medium position in the production of coal for the past three years. If the years 1942, 1943 and 1944 were taken singly or averaged, the result would not materially change the picture. Another reason for selecting this year is that it is one of the high production years, and as such should have shown a high level of employment, and if any other year of lower production had been taken, the picture would have been still further depressed. Hence any statements made, refer to the year 1943 unless otherwise stated.

Coming back to the question of the amount of time worked by the mines in Alberta, the domestic coal field, producing about three-sevenths of the annual output, worked on the





average, about  $14\frac{1}{2}$  days for a 25 working day month (Table 8 and Plate 12). The sub-bituminous and bituminous fields were substantially better with 18 and 22 days respectively. Even in the sub-bituminous field this is equivalent to a one-week lay-off every month of the year. A perusal of the individual mine reports would reveal that in many instances the reported days worked showed that the men were not employed in drawing coal, but were engaged in maintenance and other work, which could have been done readily with a maintenance crew, if sufficient orders were forthcoming to keep the regular crew at their normal mining operations. The number of days worked is graphically illustrated in Plate 12.

BY THE CHAIRMAN: Were the railway subventions discontinued altogether in 1943?

MR. DICK: I am not quite sure.

HON. MR. TANNER: No, the Emergency Coal Production Board.

The market was taken away and the coal was directed West and to provide the demands here in the province.

BY THE CHAIRMAN: It seems rather peculiar if they were working 25 days they couldn't have kept the thing up.

BY MR. FRAWLEY: That is domestic, of course.

BY THE CHAIRMAN: Well, the other is 18 and 22 days.

MR. DICK: Yes, they are divided under domestic, bituminous and sub-bituminous. Of course car shortages also affected it.

BY THE CHAIRMAN: If the subventions were not in existence in 1943 that is rather an unusual war year. It shows much less time worked.

MR. DICK: That is true.

BY THE CHAIRMAN: Have you got something to show what the days worked were in 1942 and 1944?

MR. DICK: Plate 15 shows the number of men employed and man-shifts worked, with actual cost of production. That is for 1943. 1943 of course was an abnormal year, as a war year.



BY COMMISSIONER McLURIN: You offered it as one of the best pictures you had to offer, not one of the depressed?

MR. DICK: Yes, that's right. As a matter of fact, if we had taken a normal period prior to the war it would have shown much worse!

BY COMMISSIONER MORRISON: About half.

BY THE CHAIRMAN: That's what I don't understand.

MR. DICK: I think the idea in the brief of taking 1943 was to take a picture where a large consumption of coal was being used to show the ability to produce, and if the market was enjoyed later on through subventions it would show the capability of the province to produce.

BY THE CHAIRMAN: You had subventions in 1944?

MR. DICK: No.

BY THE CHAIRMAN: You have them in 1945? You have some subventions now?

HON. MR. TANNER: There were subventions about two months ago, not more than two months ago, and a certain amount of coal is allowed to go East, provided the market is being supplied by the mines operating at the present time, but that subvention was made available to cover the amount of coal going East.

BY COMMISSIONER MORRISON: And cars are available?

MR. DICK: And really now that the subventions are on the cars are not available.

BY MR. FRAWLEY: I want to clear this up. The Chairman is asking you in a year that subventions were in full swing was your production up as high as in 1943?

MR. DICK: No.

BY MR. FRAWLEY: Subventions in other words has not put the production up of its own weight?

MR. DICK continues brief:

It must be further realized that although the mines reported a certain number of days worked, there were many cases, especially in the domestic field, where the men did not work



full shifts. A glance at the graphs shows that in the domestic and sub-bituminous fields, there was a marked falling off in the number of days worked in the summer months, a condition which did not occur in the bituminous field. At the top of each graph the possible number of days that could have been worked in each month is outlined, the difference between this and the actual being the time lost through lack of markets.

BY COMMISSIONER MORRISON: It wasn't caused by absenteeism?

MR. DICK: No. Well, I wouldn't go that far; perhaps part.

BY COMMISSIONER McLAURIN: Not entirely.

MR. DICK continues brief:

Attention should be drawn to the fact that a strike of from one to two week's duration occurred during the month of November, resulting in a decrease in the number of days worked.

It should be noted here that the figures for the number of days worked, given in this brief, are different from those given in the report of The Mines Branch for 1943. In The Mines Branch report for that year, averages were not weighted in accordance with the mines in each area, nor areas within a field.

Because the number of days worked only presents one side of the picture, and does not tell the number of men employed or shifts worked over these days, similar graphs were prepared to show the total man-shifts worked in the various fields. These are shown in Table 9 and Plate 13. Again the possible number of man-shifts that could have been worked if all men had been given full employment is outlined at the top of each graph.

In determining the number of man-shifts that could have been worked, the largest number of men employed in any one month at each mine was ascertained. For example, if 20 men were employed in January, 18 in February and March, 10 in April, etc., it was assumed that 20 men could be employed at





that particular mine without increasing their present facilities, regardless of the fact that the owners might consider 25 or 30 men as a normal working staff. This was done for every mine within the Province. The total number of men in each field multiplied by the number of shifts in a year, divided by 12, gave the average number of man-shifts that could have been worked in any one month.

From Plate 13, one can readily see that full employment has not been attained in all three fields, even while our country has been at war. From unpublished figures for 1944, while we are still at war, the employment picture is even worse. How the industry is to employ returning veterans in addition to available labor will remain a problem until the industry has fuller access to Canadian or other markets. The markets are there if arrangements are made to make them available, and this can be accomplished only through the establishment of a long-term stabilized National Policy. From a recent survey, made in July 1944, the industry could absorb 2500 men to complete the staffs at various mines. This is a factor in the re-establishment of returning veterans, but if this number was absorbed without available markets, it would make conditions worse.

In order to determine the amount of coal that would probably be mined, if full time continuous employment was assured, and in view of the fact that different areas have different productive capacities, the possible tonnages for each area were calculated separately and totalled to give the possible tonnage for each field. The actual and possible tonnages that could have been attained are shown in Table 10 and Plates 15, 16 and 17. Superimposed on the graphs are curves of man-shifts worked and the number of men employed.

From the table, the production of coal for 1943 could quite as easily have been  $10\frac{1}{2}$  as  $7\frac{1}{2}$  million tons. Therefore, if the industry is expected to absorb a percentage of the returning veterans, which is only right, and full employment



is to be given to all, then production in Alberta will be relatively higher and the need of additional outlets becomes more imperative.

In presenting the case for Alberta, it is not the desire to convey the impression that lack of markets was the sole factor why more man-shifts were not worked for the number of men employed. Other factors such as sickness, absenteeism, excessive income taxes, car and truck shortages, all had a bearing in reducing the total number of man-shifts worked. To complete the picture, two supplementary tables, 11 and 12, are here presented.

The greatest number of men employed in any one month, by areas for the year 1943.  
(Based on individual mines)

Domestic Field	No. of Men	Sub-Bituminous Field	No. of Men
<u>Area</u>		<u>Area</u>	
Ardley.....	41	Coalspur.....	765
Big Valley.....	38	Pekisko.....	17
Brooks.....	38	Pincher.....	3
Camrose.....	145	Prairie Creek.....	21
Carbon.....	157	Saunders.....	134
Castor.....	227		
Champion.....	35	Total per year.	<u>1,040</u>
Drumheller.....	2,421		
Edmonton.....	909		
Gleichen.....	95		
Halcourt.....	23	<u>Bituminous Field</u>	
High Prairie.....	3	Cascade.....	324
Lethbridge.....	750	Crowsnest.....	2,284
Milk River.....	11	Mountain Park.....	939
Pakowki.....	4	Nordegg.....	445
Pembina.....	138		
Redcliff.....	44	Total per year.	<u>3,992</u>
Rochester.....	26		
Sheerness.....	46		
Taber.....	213		
Tofield.....	122		
Wetaskiwin.....	7		
Whitcourt.....	4		
Total per year....	<u>5,497</u>		

Elsewhere in this report, a classification has been put forward dividing the present classification of domestic, sub-bituminous and bituminous coals into five groups, numbered from one to five (see Plates 1 and C2). Group five of this





classification is designated as a poor storage and shipping coal. Therefore, it seems desirable to state here that only about 10% of such coal is mined in the domestic field. The figures for the domestic field are as follows:

Group 3	-	581,107 tons
" 4	-	2,526,658 "
" 5	-	<u>308,272 "</u>
		<u>3,416,037 tons</u>

As the Alberta consumption of coal, exclusive of railway coal is  $1\frac{1}{2}$  million tons, all of Group 5 and the lower grades of Group 4 could be used for home consumption, exporting the better grades of Group 4 and higher groups which have good shipping qualities.

Incidentally, much of this Group 5 coal is being shipped to British Columbia for immediate use.

#### SUMMARY

In the exportation of coal, specific grades should be established similar to those in use for grain where No. 1 Hard wheat is known the world over and buyers buy grain on grade. However, grading is discussed later in this brief under "Standardization".

The complete graphical analysis of the Alberta coal industry presented in this section clearly discloses that the root cause from which all other disturbing factors radiate is "lack of markets". These factors include intermittent employment, efficiency of operation, underground maintenance as affecting the general condition of the mines and labor relationship, wages and other related matters. But, as clearly shown, there is no lack of markets. An existing large market needs only to be made available and this can be achieved only through the establishment of a sound national coal policy of long duration and subject to alteration only at widely separated, clearly specified times, by an Act of Parliament.



MINES AND EMPLOYMENT

Summary of statistics collected by the Alberta Provincial statisticians for the fiscal year ending March 31, 1944 with comparative annual summaries for the years 1941-42, 1942-43 and 1943-44.

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The following statistics, Tables 13 to 16, were collected from the operators of coal mines in Alberta by means of schedules specifically outlined to reveal certain information for the administration and regulation of certain provisions of the Industrial Wages Security Act, Cap. 281 -- RSA 1942, and the Department of Trade and Industry Act, Chap. 14 --- RSA March 31, 1942. By reason of this fact, the statistics thus shown are not comparable with others issued by the Alberta Department of Lands and Mines and the Dominion Bureau of Statistics for the respective calendar years. They are also subject to the limitations of wartime conditions affecting completeness, accuracy and coverage.

The statistics in Table 13 were collected from 34 coal areas of which ten are bituminous or sub-bituminous, the remainder being lignite or domestic. The greater part of the production comes from the former because this coal is harder and has a greater BTU content, but the latter can register a very high heating value which is much appreciated especially in the local market. Both, however, are popular in the export market.

The capital investment in Alberta's coal mines totals about \$40,000,000 and the industry employs more than 8,000 persons of whom less than 100 are females. The annual payroll amounts to between \$12,000,000 and \$15,000,000.

The Crow's Nest Pass area led production in Alberta for the year ending March 31, 1944 with a production of nearly 1,900,000 tons and salaries and wages paid were in proportion. This area is a feeder for the railways and export markets especially in the north-west United States. A significant factor is that the production comes from only seven mines while



in the Drumheller area, which was the next largest producer, 24 mines produced 1,600,000 tons. The combined total of these areas accounts for nearly half of Alberta's production and employ more than 4,000 persons with salaries and wages of more than \$7,800,000.

The Mountain Park and Coalspur areas range high in the scale of values, their combined production equalling that of Drumheller although there are only twelve mines in these two areas. Next comes Lethbridge with production of 500,000 tons from eight mines employing 665 persons and paying wages and salaries of more than \$1,200,000. The remaining areas follow with smaller returns.

The rates of wages paid in Alberta vary with the type of field. As a rule, higher wages are paid in the bituminous and sub-bituminous mines. See Table 14.

No industry of similar capitalization in Alberta employs as many wage earners as the coal industry but the situation has changed somewhat during the past ten years due to the installation of new highly powered machinery and the general advancement made in labor-saving devices.

The least productive months in the year in the coal mines are from April to September and the most productive from October to March with the peak of employment occurring in January. See Table 15. Loss of production through lack of orders, absenteeism and certain minor causes for the five-year period 1938 to 1942 inclusive, is illustrated in Table 16.

(Page 2354 follows)





MARKETSMR. TANNER (reads)

"The extent and stability of the market is the pivot around which the welfare and future of Alberta's coal industry revolves.

The quantity available may be described, for all practical everyday purposes, as unlimited. The quality is satisfactory by the same test of practical usefulness. The Canadian market along is such, that present production could be doubled and the increase rapidly absorbed, provided that this market could be opened to Alberta coal by the lowering of the barrier incidental to the distance between the source of production, the mine in Alberta, and the great, and presently closed, are of the Canadian market, Ontario and Quebec.

It is here held that this barrier should be overcome in the National interest and as a measure of economic justice to Western Canada.

The National interest, apart from the strictly economic sense which is dealt with elsewhere, has been in the past and is again today highlighted by the exigencies in time of war. In the War years 1914-18 the welfare of Canadian citizens and industry were in jeopardy through disturbances of coal production in the United States. We are vulnerable to the same risks today.

At the moment reliable press reports (1) place the United States deficit at 40,000,000 of bituminous and 6,000,000 tons of anthracite. 10,000,000 of the bituminous deficit will come out of stock piles but the balance, 30,000,000 tons, will need to be trimmed from domestic and industrial consumers. It is proposed to reduce anthracite quotas from 87½% to 80% of 1941 consumption to meet needs for this fuel. American Solid Fuels Administration for War tabulation reveals 400 plants with less than 15 days' supply. The American mine labour week at 54 hours is already 4 hours greater than that of Great Britain and cannot be stretched further. Any extensive stoppage of work in U. S. coal fields could not help but have most serious repercussions in Canada particularly in times such as these. With the best of

(1) "Business Week" Jan. 20, 1945.



good-will in the world the first duty of United States authorities in emergency or dire need will be to protect their own public and industrial needs.

It is surely short sighted and an invitation to disaster to place unbalanced dependence on the good-will of the United States, who may be themselves powerless to help us, for supplies of such vital necessity when we have the means, through sound fostering, to develop our own supplies from sources of practically unlimited capacity to serve our needs. Sources, moreover, which are well inland and thus in a measure protected even from some of the dangers of war.

To illustrate further: In the Toronto area for some years prior to the outbreak of the present war the amount of public moneys paid out for fuel by the Municipal Welfare Departments, ran into hundreds of thousands of dollars annually. Apart from local handling charges this money went to the United States to pay for American mined coal and to American railwaymen for hauling it to the Canadian border. So we had this situation: The Canadian Government was sending Canadian dollars across the line to assist in keeping employed American miners and railwaymen, thereby keeping them off the public relief rolls in their own country, while Canadian miners and other classes of labour that could have mined in Canada and transported this same amount of coal to Ontario, were idle and in many instances had to be cared for by public welfare organizations in our own country. Canada was certainly very generous. We were, by sending moneys across the line for coal, relieving the United States Government of the cost of keeping thousands of their citizens on public welfare and at the same time paying out hundreds of thousands of dollars in order to maintain Canadian citizens on relief in this country. What was true of the Toronto area applied equally to other Canadian districts in like need in those years."

BY THE CHAIRMAN - Those years, were the five years before the war?

BY MR. TANNER - Just prior to the war.

BY W. J. DICK - From 1930 on.





BY THE CHAIRMAN - From 1932 until 1939 subventions were in force out here, and you had a competitive rate and could go into Ontario and compete with American coal there, certain parts of it.

BY MR. TANNER - One difficulty was the fact of no long range policy, no inducement, it was changed from time to time and no assurance that it would be carried on, and in order to handle that market it must be on a long term basis without any change to give the operators some opportunity to get into that market.

Q. Did the operators here make an endeavor to take advantage of those subventions?

A. Yes, as you will see later in the brief, substantial tonnages moved.

Q. I can't see why this situation should have arisen while those subventions were in force.

BY MR. FRAWLEY - I would suggest that you make a comprehensive statement on what is troubling the Chairman. Subventions have moved enormous quantities of Nova Scotia coal to Upper Canada, and I take it that it has not done the same here. Why were subventions not the cure-all during the years in which they were in force?

A. That will be all covered later on.

MR. TANNER (continues brief)

"The growth and development of Alberta's coal industry from birth to the end of 1944 is depicted in Table No. 3. Since 1886, a total of 204,000,000 tons valued at \$628,000,000, have been produced. This production has made a substantial contribution to employment of Canadian workmen and enhancement of Canadian wealth over the years. Not, however, the anomalous situation, that during the depression years when the need for Canadian production and employment was greatest, the production of Alberta mines was at its lowest ebb in 25 years.

The coal produced in Alberta has been marketed in the period 1915-43, inclusive, as shown in Table 7.

The coal produced, as to principal areas and mines in Alberta, 1934-43 inclusive, is shown as per Table 17.



Of the 39 coal producing areas in the Province for the ten year period 1934-1943, 5 may be classed as Bituminous, 6 as Sub-bituminous and the balance of 28 is often described as domestic coal. The bituminous and sub-bituminous areas are located on the eastern slope of the Rocky Mountains and the lignite is found in the remainder of the areas. Of the coal produced and sold, about 54 percent is bituminous and sub-bituminous and 46 per cent lignite or domestic. The sales of bituminous and sub-bituminous amount to 89 per cent of the amount of production, with corresponding figures of 98 per cent for lignite or domestic, making a sales average, 93 per cent of total production for the ten-year period. It should be taken into account, however, that out of the immense mineable reserves of 46,000,000,000 tons, less than the average of 6,000,000 tons were sold and produced annually in 6 of the 10 years mentioned.

A ten year survey covering the years 1934-43, inclusive, showing the distribution of sales outside Alberta, as from the different producing areas within the Province and by percentage as to markets is given in Table 18.

A progressive analysis of this ten year sale period, covering production and sales destination, both in tonnage and percentage, is given in Table 19.

#### Alberta Sales

It will be noted from sales tables that domestic requirements absorb approximately one quarter of the total production. Apart from disturbance to normal markets through war conditions, local usage, in total tonnage has been fairly constant and may be expected to remain so. Moderate growth in demand, through increasing population, will be subject to offset from competitive fuels such as natural gas and residual fuel oil abundant in this Province. Large scale industrial development or extensive uses of coal for synthetic products is hardly to be expected to create material additional markets for some time to come, although these have wide possibilities and are worthy of every encouragement.



British Columbia

The market for Alberta coal in our neighboring Province to the West has remained fairly steady at about 5% of production and at approximately 250,000 tons per annum, prior to War years. It is now considerably above this figure to meet British Columbia's need for fuel in absence of normal supplies of oil and wood fuels available to that market in time of peace. It is expected with the passing of War emergencies that sales of Alberta coal in this market after an expected recession during the reconstruction period, will revert to and be maintained at about pre-war levels.

Saskatchewan

The market for Alberta coal in Saskatchewan has for many years been in the close neighborhood of 1,100,000 tons per annum. In War years, for large military camps and for industrial purposes and for enhanced supplies to more prosperous domestic users it has reached higher figures. Saskatchewan lignite fields may be expected to fill an expanding area of the available market in that Province and under normal years Alberta sales in this territory may find it hard to exceed or even hold pre-War levels.

Manitoba

Previous to the outbreak of War Alberta coal sales in Manitoba from a high peak of 612,542 tons in 1927 were on a declining scale to a low figure of 354,857 tons in 1940. Since then War needs and interruption to other sources of supply have raised total shipments to 1943 figure of 627,368 tons. With the passing of these special conditions the Manitoba outlet for Alberta coal may be expected to decline. The principal cause is again the expansion and development of the lignite fields of Saskatchewan. This coal is readily mineable, of fairly satisfactory quality for many industrial and heating needs and with advantage of proximity to market is, and may be expected to continue, displacing a material tonnage of Alberta coal."

BY THE CHAIRMAN - And very well prepared for the domestic market.





MR. TANNER (continues Brief)Ontario and Quebec

As the situation existed prior to the outbreak of the present world War, and as it most likely will prevail upon conclusion thereof, it would appear the principal substantial expansion of markets for Alberta coal lies in Ontario and possibly a portion of Quebec. In spite of many handicaps, - distance and uncertainties as to freight rates and subventions to be dealt with elsewhere, - Alberta coal was slowly gaining a foothold in this market and was making accelerated progress, when shipments to this territory were stopped through War conditions, making it difficult to transport our coal Eastward and necessary to divert, under Dominion Coal Control Orders, production from Alberta mines to serve other market needs.

The position of the Alberta coal movement to the Ontario market in the typical years 1939-40 was as follows:

Tonnage moved in 1939 and 1940

<u>1939</u>	<u>Tons</u>	<u>Per Ton</u>	<u>Subvention Paid. Amount</u>
P.C. 740 (Domestic)	91,493	\$2.50	\$228,739.70
P.C. 3970 (Industrial)	1,336	1.71	2,633.68
P.C. 3970 (Railway)	<u>142,532</u>	<u>1.88</u>	<u>268,295.77</u>
Total	235,361	\$2.12	\$499,669.15
<u>1940</u>	<u>Tons</u>	<u>Per Ton</u>	<u>Amount</u>
P.C. 740 (Domestic)	150,164	\$2.50	\$375,418.27
Industrial	9,495	1.79	17,000.38
Railway	<u>312,766</u>	<u>1.90</u>	<u>593,318.83</u>
Total	472,425	\$2.08	\$985,737.48

BY MR. FRAWLEY - Is there anything in that Table that you want to call attention to?

A. 235,361 tons were moved in 1939, and it was increased to 472,425 tons in 1940.

BY COMMISSIONER MORRISON - Less than a half million tons?

A. Yes.

MR. TANNER (continues Brief)

"It will be noted that the increased tonnage to Ontario for 1940 over 1939 amounts to 237,064 tons, or slightly over 100%.



The amount paid in subventions on coal shipped to Ontario from Alberta increased from \$500,000.00 in 1939 to \$986,000.00 in 1940. It should be observed that the bulk of this increased movement covered coal used by the railways or in other words, bituminous coal."

BY THE CHAIRMAN - Where did you get those figures from?

A. The Dominion Bureau of Statistics.

BY MR. FRAWLEY - The amount paid under subventions?

A. Yes.

Q. Did you compare it with what was paid in Nova Scotia?

A. We compare it a little later on.

MR. TANNER (continues Brief)

The Subventions.

We ship coal to Ontario from Alberta under the provision of Order-in-Council P.C. 7588, dated October 1st, 1941, (which rescinded Orders-in-Council P.C. 740 of the 24th day of April, 1933, and P.C. 3286 of the 4th day of January, 1939) as amended by P.C. 9794 of the 16th day of December, 1941, and as amended by P.C. 4740 of the 5th day of June, 1942, which provide among other things:

1. For a subvention of \$2.50 per net ton and applies to points in Ontario to which the tariff freight rate in effect at the time of shipment is eight dollars or in excess thereof which would include most of Ontario approximately East and South of Lake Nipigon.

2. For a subvention of the difference in amount between the laid down cost of U.S. coal and Alberta coal shipped direct to consumers at points of consumption in Ontario approximately West of Lake Nipigon but subject to a maximum of 25% of the tariff freight rate in effect at the time of shipment."

BY THE CHAIRMAN - That paragraph 2 - "For a subvention of the difference in amount between the laid down cost of U. S. coal and Alberta coal shipped direct to consumers at points of consumption in Ontario approximately West of Lake Nipigon but subject to a maximum?"

A. There was a difference - "but subject to a maximum of 25% of





the tariff freight rate in effect at the time of shipment".

BY MR. FRAWLEY - They drew a line against you at Lake Nipigon?

A. Yes, and the maximum could only be 25% of the tariff freight.

MR. TANNER (continues Brief)

"3. For a subvention of 30% of the effective tariff freight rate at time of shipment to dealers for resale in that territory of Ontario approximately West of Lake Nipigon subject to a maximum payment of \$2.00 per net ton.

4. For a subvention of 25% of the effective tariff rate to Ontario points on coal for railway use subject to a maximum of \$2.00 per net ton.

Most of the coal shipped under P.C. 740, and section 4 of P.C. 7588 carrying the straight \$2.50 per ton subvention has been for domestic use. It is this movement in particular that it is desirable to further encourage. The matter of how much domestic coal we can put into Ontario under existing conditions depends mainly on the price factor; in other words, the relative prices of anthracite, coke, pocahontas coal and Alberta coal.

#### Relative Prices

To understand the matter of relative prices on Alberta as compared with American anthracite or coke, it may be explained that Alberta coal costs the dealer in Ontario the same price in all parts of the Province. This is not the case with anthracite or other imported fuels. Toronto may be taken as the place where the minimum price in the Province exists for these fuels. This is due to the splendid dockage facilities there for the handling of imported fuels brought in from the United States by water route. However, when one leaves the Toronto area and starts inland, he finds, due to the rail haul, that the price of American coal increases to the dealer and to the consumer. Here are some of the instances:



Relative Retail Prices(1939-40)Toronto

American anthracite	\$13.75
By-products - Coke	11.50
Pocahontas (used extensively for domestic purposes)	11.25
Alberta Drumheller Furnace Lump	12.15

It will be seen that the margin in favor of Alberta in the Toronto area as compared with anthracite is only \$1.60; with coke it is 65¢ higher, and with pocahontas 90¢ higher.

On the other hand it will be observed that at Peterborough some distance inland, the prices range as follows:

Anthracite	\$15.00
Coke	14.50
Pocahontas	14.00
Alberta	12.00

The margin here in favor of Alberta coal against anthracite is \$3.00, against coke \$2.50, and against Pocahontas \$2.00.

This margin increases as one gets further north into Ontario until at Timmons, for instance, the prices are:

Anthracite	\$19.00
Coke	18.00
Pocahontas	16.50
Alberta	13.50

It will be observed from the above that the price of Alberta coal is also higher at Timmins than in Toronto, but this is due to the fact that dealers there demand a larger gross margin than the dealers in Toronto, although the coal costs them the same laid in their yards in Toronto. But, the retail price of anthracite is very much higher than in Toronto. But, the retail price of anthracite is very much higher than in Toronto, giving to Alberta a favorable price differential of \$5.50 a ton.

Comparison in tonnages

By reason of the marked price differential in favor of Alberta coal at Timmins, we place considerable Alberta coal in that area. For instance, the city of Timmins with the Towns of Schumacher and South Porcupine, all of which really constitute the one area, purchased 30,001 tons of Alberta coal during the year 1940. The population of this area might be compared to



Brantford, but in that city only 996 tons were marketed.

ONTARIO MARKET CONDITIONS - 1943

There has been no Alberta coal movement into Ontario since October 1st, 1942, excepting a very small tonnage into the extreme northwestern section of the Province.

The price on Drumheller furnace lump at the time the shipments to the east were suspended was \$4.15. The freight rate is \$5.50, making a laid down price in dealers' yards at any point in Ontario of \$9.65."

BY THE CHAIRMAN - I noticed that one coal operator in Drumheller the other day had some very nice orders from Ontario at the present time. What he is sending out is in open box cars which is bad for the coal.

A. They have had that difficulty, car shortage.

MR. TANNER (continues Brief)

"Dealers in the cities and the larger towns work on a gross margin of \$3.00 per ton. This then meant that the consumer price at most points in Ontario was from \$12.50 to \$12.65 per ton.

If Alberta coal was being shipped to Ontario today, due to increases allowed by the Wartime Prices and Trade Board, the price on Drumheller lump would be \$13.00 - \$13.15 per ton for the reason that an increase of 50¢ per ton is permitted the mines.

The prices today on American Anthracite and American Pocahontas are as follows:

	<u>Anthracite</u>	<u>Pocahontas</u>	<u>Alberta</u>
Toronto	\$ 15.50	\$13.00	(if shipment possible)
Barrie	16.50	14.00	
Brantford	16.00	13.75	
Brockville	16.00	--	
Carleton Place	16.50	14.00	
Collingwood	16.50	14.00	
Fort William	16.80	12.25	
North Bay	17.25	15.00	
Niagara Falls	15.00	--	\$13.00
Oshawa	16.00	14.00	
Owen Sound	16.50	14.00	to
Peterborough	16.75	13.50	
Port Hope	16.00	13.50	13.15
St. Catharines	15.75	13.75	
St. Thomas	16.00	13.50	
Stratford	16.50	13.00	
Windsor	16.00	13.00	





It must be noted that the Dominion Government is subsidizing American Anthracite to the extent of 70¢ per ton. If this subsidy were not being paid, the retail price of Anthracite in Ontario would be 70¢ higher than shown in the above list."

BY COMMISSIONER MORRISON - What is the number? Is it an Order-in-Council that authorized that?

A. What?

Q. The subsidy of 70¢ a ton? You said there was a subsidy. Is that by Order-in-Council, or a price subsidy paid under the Wart. Prices and Trade Board?

BY MR. FRAWLEY - It must be the effect of something.

BY COMMISSIONER McLAURIN - Price ceiling.

BY MR. FRAWLEY - Can you give us a reference to that Order?

BY COMMISSIONER McLAURIN - It is price ceiling, and if that is right you have to be careful in singling out coal, in drawing too much significance from it, because they are subsidizing oranges in Ottawa.

BY THE CHAIRMAN - Does that mean that the Government themselves are actually paying these anthracite dealers in the United States the 70¢?

A. I understand they are, the same as on certain gasoline that is being shipped in, and other goods.

BY MR. FRAWLEY - They keep the price down.

BY COMMISSIONER McLAURIN - The American ceiling didn't come in as fast as ours and consequently anything you got from the United States cost more, and to maintain our ceiling the Government has to put up the money.

BY MR. FRAWLEY - I understand it is from the Commodity Price Stabilizing Board, administered by Hector McKinnon. It is very very general.

MR. TANNER (continues brief)

"The extent of the Central Canada market is revealed by Table 20 showing the imports of American bituminous coal in recent years.

This is the market which Alberta coal would and could



acceptably serve if assisted to overcome the distance barrier. In the filling of this market by Alberta coal, the real interest of Ontario and Quebec marches with our own, inasmuch as every Canadian dollar remaining in circulation in Canada, whether as wages to a miner or as railway revenue, helps to provide a Canadian market for the industrial production of Ontario and Quebec.

#### American Market

There has always been a small amount of Alberta bituminous coal marketed in the adjoining States of the Union.

See Table 7 and Plate II. Owing to the disruptions of war interfering with the usual supplies of American coal to this area, it has been possible by joint arrangement between Canadian Coal Control and the American Co-ordinator of Solid Fuels to moderately increase Alberta shipments to such markets during these war years. This is a temporary movement. In this area in the past they have welcomed Canadian coal when supply was short but when their own coals become plentiful, barriers of one description or another have restricted the free entrance of Alberta coal. The control of such movement rests in large measure with the U.S. Interstate Commerce Commission, which can be, and sometimes have been, quite arbitrary in the issue of regulations unfavorable to Canadian coal when they consider the circumstances so warrant. The U. S. Tariff Board can levy regional tariffs, if they so desire, and through this means one particular State may receive greater protection from Canadian imports than another if that particular State feels that it is being adversely affected by the entry of, say, foreign coal for instance and appeals for protection by such federal means. The difficulties and contingencies inherent in this position have precluded the building up of a stable normal outlet for Alberta coal in these adjacent and natural markets for the product of our mines.

As U. S. coal will in all likelihood for years to come enjoy a substantial share of the Canadian market in Eastern Canada, it would appear equitable and feasible for a Dominion - United States reciprocal agreement to be reached whereby Alberta coal in





quantity might be supplied to the adjoining western American market. An exchange of tonnage would alleviate geographic difficulties in reaching suitable markets for both countries. A quota system of this nature would appear desirable from the Canadian standpoint and if made effective would become a dependable contribution towards the steady and profitable utilization of Alberta's coal resources.

#### Railway Market

It will be noted from Table 7, that our Canadian railways have in the past been the greatest and most stable market, year in and year out, for Alberta coal. Great and stable as this market has been, it is our considered view that this market is capable of absorbing still larger tonnage and on a firmer basis than in the past.

A glance at the map of Alberta, Plate 6, will show that the main lines of the C.P.R. lie in the Southern part of the Province and procure their coal needs from the mines on their lines in that area and in like manner the C.N.R. are served in the central and northern part of the province from mines on their lines.

It will be noted from Table 7, that railway requirements were on a rising scale in the years 1939-41, attributable to the effect of subventions on the movement of railway coal into Western Ontario. Alberta coal, speaking generally, was being used on the C.P.R. for a considerable distance beyond Winnipeg, but the C.N.R. had made no serious effort to use this coal East of Winnipeg, although subventions placed the same on a proper competitive basis as far as Sioux Lookout."

BY MR. TANNER - With respect to the statement in the last paragraph - "but the C.N.R. had made no serious effort to use this coal east of Winnipeg" - the Alberta Government wishes to be absolutely fair. This statement was written before any breakdown of statistics had been submitted by the Canadian National Railways.

Since publication of this brief, Mr. S. C. Welby, General Fuel Agent of the Canadian National Railways, has pointed



out that, actually, the C.N.R. in the years 1939 to 1941 inclusive, took a total of 413,138 tons or 42 per cent of the coal re-shipped by railways to Ontario and, in fact, beyond Sioux Lookout to Savant Lake. Mr. Welby has further stated that, of the 22,402,103 tons, total taken by the railways in the 10 year period shown in column 8, Table 19, the C.N.R. took 12,207,187 tons or 54.5 per cent., which, he added, would place this railway in the position of a preferred customer. Mr. Welby stated that, at the present time, since the relaxation of war restrictions on the shipment of coal, Alberta coal is again moving as far eastward as Savant Lake.

MR. TANNER (continues Brief)

"Late in 1942 the Coal Controller was faced with the need of supplying a new market arising in the Western States and Provinces, particularly in British Columbia, in connection with war needs, and so commenced a period of allocation during which the railways were compelled to procure coal from U. S. sources for Eastern railway needs and the policy of taking coal east of the Saskatchewan boundary was sharply curtailed and was later stopped.

With the return to normal conditions it may be expected that a market for railway coal formerly enjoyed by Alberta mines can be regained. It can, and further should, be capable of expansion through the use by railways of Alberta coal further afield on their extensive systems. This could be brought about by the active interest and sympathetic support of the railways, which they might properly be encouraged to extend in their own interest. Such expansion would be productive of extensive revenue producing tonnage and a contributing factor to the prosperity of the territories they serve. A strong Dominion policy to foster the Canadian Coal Industry in the national interest would be a compelling incentive to the two great railways, in themselves national in scope, to both use Alberta coal in their own operations and to aid by suitable and reasonable freight rates in the wide extension of the markets for all types of Alberta's coal production.





Under a firm long term Canadian policy:non subventions dealt with elsewhere, not only could the railways extend their use of railway coal, but this coal could be taken from the mines on a steady year round basis. This would promote regularity of employment and stability of income for the miners, promoting industrial peace in the industry. Steady production would also allow economies in operation, in turn reflected by stabalized or reduced prices.

12:30 P.M. HEARING ADJOURNED UNTIL 2:00 P.M.

2:00 O'CLOCK P.M. - AFTERNOON SESSION

MR. TANNER (Continues reading Brief)

"It has been customary for the railway companies to place orders for coal requirements - "at pleasure". The late Mr. Justice A. A. McGillivray exhaustive study of the situation of the bituminous mines supplying the railways in 1939-40 pointed this out as a weakness to effective operations, both as against the mines and as against the interests of the workmen, in that it did not permit steady operation and employment.

It was Mr. Justice McGillivray's recommendation that through co-operation of the railways that long term contracts be arranged, coal not immediately required going into strategically located stock piles. This recommendation remains sound today and should be implemented, once the exigencies of War are out of the way.

#### RAILWAY COAL

Western bituminous mines in Alberta and Eastern British Columbia are now producing at the rate of  $4\frac{1}{2}$  million tons per year. At present, working time is not more than five and one half days per week at most mines, and at some mines not even that. In the post-war period it would certainly not be reasonable to assume any greater working time.

The railways are now using close to 4 million tons on





western lines. From the records of the past it would not appear that much reduction will take place in immediate post-war years. Even allowing there may be some reduction, a policy for stabilizing could be worked out.

If Canadian Government policy would effectuate a plan whereby the two Railways would guarantee to take from Alberta and Eastern B. C. mines a definite tonnage of  $3\frac{1}{2}$  millions per year for 10 years, divided as to Canadian Pacific - two millions, and Canadian National  $1\frac{1}{2}$  millions, this would provide for four days' work per week as an average for all mines.

The railways would be able to balance consumption against purchase by adding to or taking from stockpiles, or in the case of too heavy surplus by extending the use eastward in the head of the Lakes area, if necessary by Government assistance. At least six to nine months' requirements should be placed in emergency reserve. With this as a sound basis, industrial and other needs would take care of the balance of the week provided subventions were re-established on a long term basis for the Ontario market, to provide the same competitive condition for our mines as existed prior to the outbreak of the War."

BY COMMISSIONER MORRISON - Or reduced freight rates? I am just suggesting that. You would have no objection to that?

A. That is fine. Of course that is dealt with elsewhere in the brief.

MR. TANNER (continues Brief)

"This would permit mines to plan their future operations without the uncertainties that have previously existed.

The allocation of coal to the railways with very few exceptions is automatic, as the coal areas supply the branch of the railways contiguous to the coal mines.

The fluctuating conditions as to production it would be most desirable to improve are illustrated in accompanying Table 21.



MARKETS-GENERAL

It is apparent from the foregoing that the material expansion of Alberta coal markets on which the growth and prosperity of the industry will depend, rests upon entering to a greater extent than heretofore the Ontario and Quebec markets, an increase in the use by our railways of Alberta coal, and entry to the available market in the adjoining States of the Union.

The solution to the latter lies in arrangements between Canada and the United States as friendly nations trading together and developing such trading along lines of mutual advantage.

The barrier to be overcome in expansion of railway usage and to more effectively reach the Ontario and Quebec market is the distance and the solution lies in a favorable freight rate, supported as necessary by permanent subvention arrangements.

The same conditions, in general, apply to expansion of the market for Nova Scotia coal within Canada. Coal production in Canada, as between the principal producing areas, for the recent years 1942-44 inclusive, is shown on Table No. 22.





FREIGHT RATES AND SUBVENTIONS

Each of the studies made of Alberta's coal industry, over the past quarter century, have arrived at the barrier of distance between the mines in Alberta and the large potential Canadian markets. Each have recommended that this handicap be overcome by assistance in the shape of reduced freight rates; - by railway co-operation; and contribution towards payment of freight charges by Dominion Government subvention.

Negotiations for specific rates on Alberta coal commenced in 1922-23 at which time it was hoped that the matter would be dealt with by Parliament by way of the establishment of a Statutory rate as a precedent for which the Crow's Nest Pass grain rate is an outstanding example of the benefits to both the industry and the transportation companies. Unfortunately, this was not done. The matter was referred to the Board of Railway Commissioners, as to a fact finding body, with the request that they report back to the Government on what they considered the out-of-pocket cost to be. The Board's function was not to fix a rate but to endeavour to find a cost. Much argument was heard pro and con, the railways being on the defensive, apparently through fear of having to adjust many other rates should a favorable tariff be established for coal. In general, however, the attitude of the then President of the Canadian National Railways, the late Sir Henry Thornton, was favorable to special treatment for coal. Before a Senate Committee established to study the fuel supply of Canada he made some significant statements - the following are examples:

Senate of Canada, Report of Special Committee on the fuel supply of Canada. The Hon. J. S. McLennan, Chairman.

Sir Henry Thornton, March 21, 1923.

P. 52 Q. by Hon. Mr. Casgrain. "Under most favorable circumstances what would a ton of coal cost per mile?" A...."I could give you an answer to that a little later, with a little figuring, but of course a great deal depends on what you bring into the cost .... I can give you - and prove -



any transportation cost you want at any time for any purpose, and so can anyone else."

P. 53 Q. Hon. Mr. Laird. "Is that same method of railway cost of transportation extended into all other classes of freight as well?" A. "Oh, it is the most difficult question - to be really quite honest and not try to fool anyone - it is the most difficult question in the world to answer. For example, take a train; you can haul 18 cars of freight from A to B just as cheaply as you can haul 15 cars; I defy anyone to find in the expenses the additional cost of adding two cars to the average train, almost anywhere. The same thing is true of a passenger train; it does not cost one penny more to haul a passenger train full of people than it does to haul it empty. With your freight, the only point where it tells is when you get to the engine load; if your engine will haul only 20 cars and you put on 21 cars or 25 cars, it means that you have one train of 20 cars, right up to the capacity of the engine, and then you have got to run ANOTHER TRAIN OF FIVE CARS? WHICH IS ONLY A FOURTH OF THE CAPACITY OF THE NEXT ENGINE. So when you begin to discuss the question of what it costs to move traffic you can be led into all sorts of highways and by-ways, and get all mixed up."....

P. 56 Answering a question by the Chairman. ...."Let us take this coal proposition. We might be justified in making a very, very low price on coal in order to foster industry in the central regions, and then we would make enough out of the products of the industries, out of the increase of population, out of the general prosperity of the community, to compensate us for handling the coal at a low price."

P. 57 Q. by Hon. Mr. Gordon. ...."Do you not think there is a great, special reason why coal should be put into a class by itself and transported more cheaply than any other commodity?" A. ...."I do not know that I should like to single out coal and say that that is always entitled to more



consideration than, let us say, wheat or something else; .... But I will answer your question by saying that certainly coal is the very breath of industry and that we are justified in doing almost anything to put ourselves in possession of a reasonably cheap fuel supply not only of coal, but also of substitutes for it, like electricity."...

In reviewing the history of these freight rate negotiations of the past, it is interesting to note that an experimental rate was voluntarily implemented in July, 1923, by the Canadian National Railway (only) of \$7.00 per ton for the movement of 4,000 tons. - No subvention was paid. In August 1923 a special rate of \$9.00 was provided by the C.N.R. to apply on any additional movements beyond 4,000 tons - No subvention was paid. In September, 1923, a \$7.00 rate was again effected by the Canadian National Railway for a further experimental lot of 10,000 tons. - No subvention. Similarly

In 1925 - \$7.00 for movement of 25,000 tons.

1926 - \$9.00 for movement of 1,987 tons.

No subventions.

The specific experimental rates were established at the instance of the Alberta Government or the Ontario Government, or both.

#### FREIGHT RATES.

In 1926, upon joint application of Ontario and Alberta, the Dominion Government requested the Board of Railway Commissioners for Canada to inquire into and report upon the cost of moving coal from producing points in Western Canada to consuming points in Ontario. These costs were to be the "out of pocket cost" as well as a cost "inclusive" of maintenance and like charges and a cost also to include the element of profit.





The Board majority, two members, found these costs to be: (1)

(1) Out of pocket cost	\$7.22 per ton
(2) "Inclusive" cost	10.07 per ton
(3) "inclusive" cost, plus profit	12.20 per ton

The minority report, written by the late Honorable Frank Oliver, found (1)

(1) Out of pocket cost	\$6.50 per ton
(2) "Inclusive" cost	) Unable to draw definite conclusions from evidence submitted.
(3) "Inclusive" cost plus profit	

In review, the Board admit their difficulties in arriving at a firm basis on which to base such rates; as these quotations evidence: (2)

"There is no formula measuring the necessary and proper relation between out of pocket costs and operating costs. The only information which the Board has before it is that supplied by the railway. Consequently, it would appear to be justifiable to make use of the ratio between out of pocket, or additional cost and inclusive cost, which the railway itself presents in the figures submitted."

"An estimate of railroad costs is of necessity a very technical matter in regard to which only the accounting department of the railways themselves have information."

The Honorable Frank Oliver in his summary of evidence and conclusions states: (3)

"In the summing up herein of admitted out-of-pocket costs the Canadian Pacific Railway rate from Knee Hill to Toronto is placed at \$6.37 per ton; which for the actual haul of 2,127 miles is equal to a shade under 30 cents a ton per 100 miles. The Canadian National Railway rate from Drumheller to Toronto is placed at \$6.03 per ton. The average of the rates of the two systems, therefore, would be \$6.20. Adding 30 cents a ton for the additional haul necessary to reach all Ontario points, Nipigon, Nakina and easterly, would give a blanket rate of \$6.50 a ton. This rate should in my opinion also cover points in Quebec within 100 rail miles from Ottawa; and also points on the National



Transcontinental and branches in Northern Quebec eastward to, and including, La Tuque.

"As Montreal, the principal coal consuming point in the province of Quebec, is a very short distance beyond the suggested range of distribution from Ottawa under the blanket rate, and as Quebec city, the second greatest coal consuming point in the province, is no further by rail from the coal mines than Montreal, an additional 25 cents a ton might in my opinion be made to cover that part of the province of Quebec not covered by the \$6.50 rate, to extend as far eastward as, and including, Levis and Diamond Junction."

The balanced reasoning of the Hon. Frank Oliver as to the underlying equity of special rates for Canadian coal is as sound today as when it was written nearly twenty years ago. He said: (4)

"The difference in value of any commodity at two separated points is the reason for its movement from one point to the other. If the cost of moving is greater than the difference in value, the commodity cannot and does not move. On articles of manufacture in producing which skilled labour forms a large part of the cost the difference in value between the points of production and consumption is usually very considerable, and a comparatively high transportation rate can be paid. On the other hand the raw materials upon which skilled labour is employed and the food, fuel and other prime human necessities required by that labour are of comparatively low initial values in proportion to tonnage; and the lower their cost when they reach the point of consumption the better the opportunity that is offered for the successful employment of skilled labour. If the railroads charged the same rates on

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(1) Judgments and Orders the Board of Railway Commissioners  
of Canada, Vol. XVII, Sept. 22, 1927

P. 441

(2) do.

P. 449 and P.453.

(3) do.

P. 462

(4) do.

P. 464 and 5.





hides and wool or on flour and coal as are willingly paid on boots and blankets the hides and wool would have cost too much to be made into boots and blankets, there would be no workers to buy and use flour and coal, and consequently no traffic for the railway. Therefore railway rates are not and cannot be based on a uniform per ton per mile cost. In fixing the rate to be charged for transporting any particular commodity between any two points there must always be a question of judgment, first, as to what are the out-of-pocket costs to be covered, and second, how much of the overhead, that is, superintendence, maintenance, general expenses, etc., should be covered by that particular traffic over and above out-of-pocket costs. If a certain traffic can pay more than its per ton share of the gross overhead it may fairly be required to do so. On the other hand if a certain movement is for good and sufficient reasons desirable the fact that the rate which will allow it to be moved is not sufficient to bear its full per ton share of the gross overhead does not debar such a rate from being installed. This is the principle upon which railway freight rates are classified and numbered from one to ten. It is the chief reason why certain commodities pay double and the first-class rate while other articles are carried at what is called a "commodity rate" which may be less than that of the lowest or 10th class. Tenth class freight pays approximately one quarter as much per ton for a haul of the same mileage as first class, and 5th class approximately half as much." "The capital investment in the railroads and their equipment has been made. It is considered better to have that equipment fully employed in productive and constructive traffic even at rates that do not in themselves show a profit, rather than let it be idle or partly idle because of lack of productive traffic that cannot move because the rail will not permit."

In dealing with the financial importance of coal movement to Canada at that time, the views of this Western pioneer and Canadian patriot are well worthy of renewed and serious attention. May we be permitted to further quote from the report:(5)

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(5) Judgments and Orders The Board of Railway Commissioners of Canada, Vol. XVII, September 22, 1927. P. 467.



"Canada imported from the United States in 1926, 2,584,000 tons of anthracite at a cost of \$20,852,000, if the figures of the Canada Year Book are correct. The cost at point of purchase was roughly \$8.00 a ton. To this must be added the average cost of transportation to the Canadian boundary. Of the total amount of anthracite imported from the United States not less than two million tons found its market in Southern Ontario and in the City of Montreal.

"Alberta has coal in unlimited quantity and of a quality particularly well suited for the domestic needs that are now supplied by anthracite. No coal moves, or can move, from Alberta to Ontario to compete with United States anthracite at present rail rates. The railroads agree that they have equipment now idle during six months of every year to enable each to haul a million tons of coal from Alberta to Ontario within the six months period. Assuming that Montreal and Southern Ontario take two million tons of United States anthracite a year and that the Canadian railroads get an average of \$1.50 per ton for hauling it, their total earning is \$3,000,000. Canadians of Southern Ontario and Montreal pay to United States miners 16 million dollars for two million tons of anthracite coal, plus the cost of haul to the boundary, and then pay Canadian railroads, say, 3 million dollars for distributing it.

"At an average f.o.b. cost at the mine in Alberta of say \$3.50 per ton with a rail rate of \$6.50 there would be a distribution of \$20,000,000 of Canadian money amongst Canadians for the same service.

"Having the necessary equipment on hand to move the coal, the railways could not fail to benefit both directly and indirectly from the movement even though the rate did not pay the per ton per mile share of overhead of either of the two systems. There would seem to be at least as good reason for hauling domestic coal from Alberta to Ontario at a rate that would yield less than "inclusive" costs, as there is for hauling passenger, express and mail trains over the same tracks under similar conditions."





As precedingly noted, the Board of Railway Commissioners in their majority report found as the out-of-pocket cost of moving Alberta coal to the Ontario market the average figure of \$7.22 per ton. During the subsequent test periods from 1928 to 1932 inclusive under Order-in-Council P.C. 439 dated March 16, 1928, coal moved to Ontario points under a temporary rate of \$6.75 per net ton in respect to which the Dominion Government paid the difference between the temporary rate and tariff rate. The railways subsequently agreed to the establishment of a special rate of \$8.00 per net ton from coal originating stations in Alberta to stations in Ontario to which the normal rate was \$8.00 per net ton or in excess thereof in relation to which Order-in-Council P.C. 740, dated 24th April, 1933, provided for a subvention of \$2.50 per net ton for shipments eastward up to and including, but not beyond, Ontario.

In 1932 the question of the freight rate on Alberta coal again received attention and on recommendation of the Minister of Mines the Government instructed the Board of Transport Commissioners of Canada, under Order-in-Council P.C. 1179 of May 18, 1932, to report to the Government what is the out-of-pocket cost per ton to the railways of carrying coal from Alberta to North Bay and Toronto in the Province of Ontario. The terms of reference are significant and fairly explicit: (1)

"The Committee of the Privy Council, on the recommendation of the Minister of Mines, advise: - in view of the fact that any improvement in Canada's coal situation whereby a greater quantity of Canadian produced coal may be used, rests entirely on the question of what it costs to carry this coal by rail, and in view of the fact that during the last nine years the Government has facilitated trial shipments of coal by granting financial assistance whereby many thousands of tons of Canadian coal have been moved into markets otherwise unattainable, - that from the information gained in the above mentioned shipments and from any other source considered

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(1) Report of the Board of Transport Commissioners for Canada to His Excellency the Governor in Council, Feb. 1, 1933. P. 1.





dependable, the Board of Railway Commissioners be instructed to report to the Government what is the out-of-pocket cost per ton to the railways of carrying coal from Alberta to North Bay and Toronto, in the Province of Ontario."

The finding, based on the movement of coal in 1931, was:-

(1)

"The Board certifies to the Minister of Mines as the out-of-pocket cost from Alberta to:-

(a) North Bay               \$6.16 per ton

(b) Toronto               6.88 per ton

Attached hereto are the reasons and calculations upon which the above conclusions are based.

(Sgd.) Chief Commissioner  
and other Members."

The calculations to reach these figures included the cost of returning all cars used as empties, overruling the contention of the provinces that such costs should not be included.

If the freight charge against western coal is to be loaded with the cost of haulage of empties back from the East and to the Western mines, in other words if this space has been bought and paid for by either the mine or the purchaser of the coal, would it not be correct to assume, that, as of right, a reduced rate should be granted on the use of this space for shipments of other goods from the East back to the mines and thus equitably reduce cost of supplies to mines and miners in Alberta.

The evidence showed that generally, old, small, box cars not suited for other traffic are used at all seasons of the year for the transportation of the coal. With special cars of larger capacity the expense ratio should be lessened to a marked degree.

In 1932 finding of the Board of Transport Commissioners did not result in an alteration of the previously adopted basic rate of \$8.00 per ton which remains in effect to date. The conclusions from the reviews of both 1926 and 1932 have always been questioned in Alberta and it is held that a thorough investigation, in the light of present day operating efficiency and particularly



on a solid trainload basis using modern cars and locomotives, would reveal a substantially lower cost unit.

While the rate itself is open to question the paralyzing weakness, in both freight rate and subvention features of the plan, lies in the fact that it is not a permanent or stable arrangement. Moreover any alternative implemented should not only be of a permanent character but should also provide a measure of flexibility in order to be able to meet changed or emergency conditions immediately. It is true that the present arrangement has gone on from year to year and is still in effect (subject to temporary curtailment as to certain shipments under orders of the Coal Administrator) but it is not a basis on which to build either an increasing production or a sound marketing programme.

At the present time and, in fact, during the entire period of the movement of Alberta coal to Ontario, we have been dependent on the whim and fancy of the railroads and the Government of the day at Ottawa as to the continuance of the transportation of it to Eastern Canada. To repeat our rate is as follows:

To the Railroads....\$8.00 per ton

To the Mines..... 5.50 per ton.

The difference between the amount the railways receive and the amount the mines actually pay, viz. \$2.50, is paid by way of subvention by the Dominion Government.

The \$8.00 rate to the railways is purely a volunteer rate and it could be withdrawn by them at any time. It is not a rate ordered by the Transport Commission or by the Parliament of Canada.

Similarly, the \$2.50 per ton subvention is provided by Order-in-Council, although the required moneys are voted each year by Parliament. This could be revoked at any time."

BY THE CHAIRMAN - If the subvention of \$2.50 was withdrawn, I suppose the railway would withdraw their \$8.00 special rate?  
A. And they are at liberty to do that.





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Hon. N. E. Tanner

BY COMMISSIONER MORRISON - They would not need to withdraw it; there would be no coal moved.

BY MR. FRAWLEY - Even if it moved, if the \$2.50 was removed, then the \$8.00 would not remain at that.

BY COMMISSIONER McLAURIN - Is this all a quotation? You say: "Attached hereto are the reasons and calculations upon which the above conclusions are based." Is it taken from that report, or is it your own?

A. The calculations to reach these figures?

Q. Is that the language of the Board of Railway Commissioners still?

A. That is the way I read it.

BY MR. KING - The paragraph that starts - "The calculations to reach these figures included the cost of returning all cars used as empties".... That is the Government Brief.

BY COMMISSIONER MORRISON - Have you the reasons for the calculations?

BY MR. FRAWLEY - It is a part of the judgment of Feb. 1, 1933. They make the report to the Governor-in-Council, and then follows their judgment.

BY COMMISSIONER McLAURIN - Is it something that should go in as a separate Exhibit?

BY MR. FRAWLEY - It has been sent to me by the Railway Companies.

Q. Is it attached to this document?

BY MR. FRAWLEY - "Attached hereto", that is in the very finding of the Railway Commissioners.

BY COMMISSIONER MORRISON - Perhaps Mr. Tanner can supply the Commission with the document that he refers to as being "attached hereto"?

BY MR. TANNER - Yes, we can, because it has been supplied by the Dominion Government.

BY MR. FRAWLEY - We have got all this.

MR. TANNER (continues Brief)

The extreme diffidence of the mine operator to undertake heavy capital expenditures under the handicap of such uncertainties



will be readily understood. Such expenditures and investment are necessary in either opening new works or to modernize for efficient operation present mines. They cannot be made with reasonable regard to safety of the funds involved unless there is assurance of the long term stability of access to markets.

Working under these uncertain conditions there has also not been an incentive for Alberta mines to undertake the expenditure of any great amount of money in developing the Ontario market. For instance, one or more mines have expressed themselves as ready to erect large storage facilities in Toronto where Alberta coal could be shipped in the early part of the fuel season and stored from which Toronto retail dealers could obtain their supplies in a manner similar to that employed in the distribution of American fuels. And it may be noted that the Toronto area constitutes approximately one-third of the coal consumption of Ontario."

BY COMMISSIONER MORRISON - Do the Alberta mines express themselves as ready, Mr. Tanner?

A. I think so.

MR. TANNER (continues Brief)

"In this connection it might be explained that importers of various types of American coals carry large stocks on the coe docks and retail dealers within a radius of twenty miles thereof draw from these stocks anywhere from one to ten or more tons at a time as occasion demands. The advantage of this system is quite evident. There are three hundred retail coal dealers in Toronto, many of which are small concerns. Under city regulations a dealer, in order to obtain a license to operate, must possess a business site, a scales, covered storage, delivery facilities and at all times have at least thirty tons in storage. Many dealers have no more capital tied up in coal than the price of one car of thirty tons. As orders come in from customers the dealer does not diminish his stock on hand; he simply sends his truck down to the dock to fill the current demands of his customers. He has practically no financing to do.



On the other hand, if he wants to handle Alberta coal, he has to tie up at a minimum \$386.00 a car. This is made up as follows: 40 tons of lump at, we will say, \$4.15 per ton, F.O.B. the mine in Alberta, \$166.00; freight on 40 tons at \$5.50, \$220.00; a total of \$386.00.

It is quite apparent, therefore, that there is not any very great incentive to the retail dealer in the Toronto area to stock Alberta coal under these conditions. If he could secure it at the docks in a ton or two at a time as he can with imported coals, he would feature it and do a great deal to promote its sale. This desired arrangement can be brought about only by one or two of the Alberta mines joining together and providing covered storage facilities on the docks as is done by the importers of foreign coals."

BY COMMISSIONER MORRISON - You say this arrangement could be brought about only by one or two. Could it not be brought about by a Central Selling Agency of many mines?

A. I think where it is referring to one or two, it means it would require at least one or two to be able to finance such a thing.

Q. Your language says it can only be done by one or two.

A. By one or two getting together. Probably more would be more desirable.

Q. Do you think that a Central Selling Agency that would handle coal in the way you suggest, would be even better?

A. Central storage at least.

Q. And selling?

A. That is recommended in the brief later.

BY MR. FRAWLEY - You suggest that storage at Toronto, but your comparative price shows that Alberta cannot compete, except perhaps with American anthracite; it cannot compete with American coke or pocahontas.

BY COMMISSIONER McLAURIN - It cannot compete with anthracite having regard to your own calculations. It will take a lot more than incentive to sell that Alberta coal against that coke.





MR. TANNER (continues Brief)

"But as already stated, Alberta mines can not undertake an expenditure of this type when there is no definite assurance that the Government at Ottawa will continue its payment of subventions or the railways continue to haul the coal from Alberta to Ontario at \$8.00 per ton."

BY MR. TANNER - It seems we are resting our case on the freight rate being held at \$8.00 per ton, while we have argued all through the brief that it should be reduced.

MR. TANNER (continues Brief)"Shipments to Quebec"

If the present freight rate of \$5.50 per ton - that is \$5.50 after the subvention of \$2.50 has been paid by the Dominion Government - or even a lower rate can be made permanent, or for even a ten year period, it should also be extended to apply to a certain area in the Province of Quebec. There would, of course, arise the question of the extent of that area. It could scarcely be expected that Alberta coal could have the same rate as far east as Gaspé, for instance. It should have the same rate, however, into the Noranda-Malartic area of Quebec and to Montreal. As a basis of reckoning the distance into Quebec on which the Ontario rate should apply, the following yardstick might be employed.

In using this yardstick the endeavour is to point out that on the mileage basis the haul on coal from Alberta to Montreal and to the Noranda-Rouyn-Val d'Or mining areas in northwestern Quebec is not as great as it is to Windsor in southwestern Ontario, to which point our \$5.50 rate applies, and that when dealt with on a mileage basis the interprovincial boundary should not constitute a barrier.

For instance, on a C.P.R. haul, coal coming to Windsor or any other point in Ontario or Quebec must pass through Sudbury. We can take Sudbury, therefore, as a C.P.R. distributing point for Eastern Canada. The railway mileage from there to Windsor



is 485 miles. The mileage from Sudbury to Montreal is only 437 miles, a shorter distance by 48 miles. If we have a \$5.50 rate to Windsor, why should we not have it to Montreal?"

BY THE CHAIRMAN - The Dominion Coal (I am not giving any secrets away) but they have half that.

A. This is being used as an argument to this effect, that the boundary of the Province should not be the boundary.

BY THE CHAIRMAN - I agree with that.

BY MR. FRAWLEY - Do any of your people know why it was the Province of Ontario? The steam coal people told us that was one reason why they could not get into this same country around Noranda, because the interprovincial boundary line was against them.

BY COMMISSIONER MORRISON - They wanted to leave a little bit for the Province by the Sea.

BY MR. DICK - I think around that time the Nova Scotia mines were serving that under another subvention.

MR. TANNER (continues Brief)

Again dealing with the C.P.R. lines, the distance from Sudbury to Noranda in northwestern Quebec is only 304 miles, 181 miles shorter than the haul from Sudbury to Windsor.

It would seem reasonable to have the same \$5.50 rate to Noranda.

From Noranda on to the Val d'Or and the Malartic area in Quebec is a matter of an additional haul of only 60 miles, or 364 miles from Sudbury as compared to 485 miles of a haul to Windsor.

It is contended that a rate of \$5.50 to the Val d'Or-Malartic mining camps should apply.

In a similar manner comparisons can be made with C.N.R. haulages. In their cases take two such points as Ontario distributing centres, viz. Capreol and Cochrane; the former for the diverting of coal cars going to points in which is commonly referred to as old Ontario as well as for coal that would be consigned to Montreal.





The mileage from Drumheller, Alberta, to Cochrane, which is the junction point with the Temiskaming and Northern Ontario is 1559 miles. The distance from Cochrane over the T. & N.O. to Noranda in northwestern Quebec is 156 miles, making a total haulage from Drumheller to Noranda of 1715 miles.

It is interesting to compare this mileage with that from Drumheller to Windsor by the C.N.R.'s own through line via Longlac and Capreol. This entails a haul of 2191 miles, being 485 miles greater than the haul to Noranda. Notwithstanding this, Alberta coal has had the \$5.50 rate to Windsor and has not been granted a like rate to Noranda.

Coal coming into the Malartic-Val d'Or area of northwestern Quebec is hauled by the C.N.R. on their main line through Cochrane to Senneterre, 184 miles east of Cochrane, and then on down to Malartic. This distance from Drumheller to Malartic is 1796 miles. This again is around 400 miles shorter than to Windsor where the \$5.50 rate applies.

It seems reasonable, therefore, that Alberta coal should have the \$5.50 rate to certain areas in Quebec, particularly so where the mileage is shorter than to certain points in Ontario which take this rate.

The Basic Freight Rate.

As to the sufficiency of the basic \$8.00 per ton freight rate, Alberta to Ontario, it is our regret that we cannot submit authoratative data. The Railway Companies are the only people who have access to all the figures covering the cost of the railway operation, and a complete understanding of them (if such a thing is possible.) It is respectfully suggested that your Commission might explore this matter fully with the Railways."

BY THE CHAIRMAN - Do you think this Commission would be as well qualified to go into this matter as the Board of Railway Transport?

A. Frankly, I think you have authority to do it, and we would be very pleased to see you do it.

BY THE CHAIRMAN - I am glad to know that you have at least some



hopes.

BY COMMISSIONER McLAURIN - They said explore. They may not want us to come home.

BY MR. TANNER - We certainly do hope that you can see your way clear to go into this as thoroughly as possible with those men who have the information.

MR. TANNER (continues Brief)

"The railways might be asked to consider in particular, and discuss before your Commission, the possibilities for cheaper transportation costs through moving coal in solid trains in cars of special type. It is understood that such practices have been developed and used to marked advantage in moving similar products in the United States. The shipment of coal in long straight hauls, say from Alberta to Ontario, would seem especially susceptible to economies through this method.

As to the importance of coal haulage, as a whole, to the Canadian railways there can be no question. In total tonnage transported it equals grain, for which, as mentioned, a special statutory rate structure has been established. As a native product essential to both the industrial and public welfare of the Canadian people it is felt that coal in all counts merits the same consideration.

Comparison of coal with grain as shown on Table 23.

TABLE 23  
REVENUE FREIGHT LOADED BY CANADIAN RAILWAY SYSTEMS  
DOMINION BUREAU OF STATISTICS

<u>Millions of Tons</u>		
<u>Calendar Years</u>	<u>Grain and Their Products</u>	<u>Coal and Coke</u>
1926	19.9	24.3
1929	18.8	24.4
1932	16.4	14.4
1937	10.4	17.4
1938	14.4	15.1
1939	17.4	17.2
1940	16.8	19.3
1941	22.3	21.9
1942	20.3	25.4
1943	26.9	27.3
Total	183.6	206.7
Average	18.3	20.6



BARLOW REPORT

The conclusions of the Right Honorable Sir Montague Barlow, after a thorough survey of the Alberta coal industry in 1935 re relation to the Ontario market and the question of freight rates and subventions were: - (1)

"1. That the Railway Companies, in connection with P.C. 740, and the subvention thereunder, be asked to give a friendly assurance, on the lines known as a gentleman's agreement, that the arrangements shall be continued say for five years; and further, that a reduction for the same period of 50¢ off the present charge of \$8.00 should be conceded.

"2. That the Dominion Government similarly be asked for an assurance that the \$2.50 subvention be continued for five years; and with an increase of 50¢ for the same period to overcome temporary initial difficulties, the increase to be reconsidered at the end of the period, if a substantial increase in traffic has been by that time secured."

BY THE CHAIRMAN - That is, that there should be a reduction of 50¢ a ton?

A. In the freight rates.

Q. But the \$2.50 subvention should also be increased by 50¢ a ton?

BY MR. FRAWLEY - So you would be \$1.00 a ton better off?

A. Yes.

BY THE CHAIRMAN - The only reason that I would reduce freight rates would be to help the tax payers of this country; to save 50¢ a ton on transportation is another problem?

A. That would help.

BY COMMISSIONER McLAURIN - The Barlow Report solves nothing. Leaving your capital investment for 5 years, or maybe 10 or 15 years; it must be amortized. Five years would just get you into trouble.

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(1) Report of the Royal Commission respecting the Coal Industry of the Province of Alberta, 1935, Sir Montague Barlow, Page 1.





BY COMMISSIONER MORRISON - Perhaps that is the reason why the Alberta Government didn't implement that part of the Report.

BY MR. TANNER - I don't know what was in his mind at all, but if we had that agreement for five years - it was just asking that they give them that consideration. They had no authority whatever to deal with the railways.

MR. TANNER (continues Brief)

"SUBVENTIONS

Subventions, originally established in 1928, have undoubtedly helped to move Canadian coal to market. They have shown that there is a Canadian market ready to take Canadian coal in quantity, but they have, in effect, only opened the door to the market. The failure of both the operator and the market purchaser to fully respond has been due to the fact that in any year, or at any time, this door might be slammed shut.

It would appear that when help to move coal both from the far Eastern fields of Nova Scotia and New Brunswick and the far Western mines of Alberta and British Columbia to Ontario and Quebec was originally mooted, there was a great deal of argument, both as to an appropriate freight rate and as to the need for assistance from the Dominion treasury in the public interest. The arrangements finally made were in the nature of a compromise between conflicting arguments and influences, and as an experiment. An experiment intended, as to the railways, to ascertain if, at the rate established, they could earn a profit, or at least break even, and on the part of the Government to find if the help, and the marketing of this Canadian coal through such assistance, was of general and justifiable public benefit.

No definite information as to the sufficiency or otherwise of the railway freight rate is presently available, and as the freight rate has a direct bearing on the subvention rate, there is here an additional and valid reason why your Commission might with propriety ask for complete information herein from the railways. Without information to the contrary, it would be reasonable to assume that the rate has been satisfactory to the railways as over



the intervening 16 years, millions of tons of coal have been moved to market under the arrangement without serious complaint, otherwise to be expected, from the carriers.

That the subventions paid by the Dominion, as part of this original compromise assistance plan, is of general public benefit, is also now recognized and demonstrated by its continuance from year to year. The economic justice of this assistance from the national viewpoint will be dealt with elsewhere in this submission.

Total coal subventions, with average rate, 1928-43 inclusive, paid in the movement of Canadian coal is as shown in Table 24.

The allocation of these subventions, by Provinces, is shown on Table 25.

The distribution of shipments of Alberta coal made under subvention assistance is shown on Table 26.

The different kinds of Alberta coal moving to the Manitoba and Ontario markets, respectively, is shown on Tables 27 and 28.

As of general interest, and in case the same has not been already laid before you by our sister Province of British Columbia, we include a breakdown of the coal moved under subvention from British Columbia Crows' Nest area to Manitoba and Ontario and as the latter is the predominant market a further division as to the kinds of coal, as per Tables 29 and 30 respectively.





PUBLICITY

As a requisite to the successful marketing of Canadian coal in Canada, publicity assumed a role of major proportions and should involve the use of every available means for building favorable public opinion and stimulating not only consumer interest but demand.

The Federal Government as a result of War Loan drives has had ample tangible proof of the need for and benefits to be derived from carefully planned intensive and extensive publicity campaigns and every type of service used in such campaigns should be used in selling Canadian coal to Canadians.

It is understood, of course, that there should be three phases of publicity, namely one specifically conducted by operators to assist in selling their particular kind of coal, another conducted by or with the assistance of the Provincial Governments to assist in selling all types of coal in their respective provinces and a third of a general character conducted by the Federal Government.

It is respectfully submitted that, while the Federal Government's publicity effort should cover Canada from coast to coast, it should be concentrated especially in Ontario and Quebec.

Radio programmes, newspaper statements and advertisements and motion picture news reel and short features should be prepared and distributed from coast to coast by the federal government. Billboards and other forms of outdoor advertising might be concentrated in Ontario as should exhibits at fairs and exhibitions, lectures before clubs and organizations and, possible travelling demonstrators capable of demonstrating efficient methods of using Canadian coal especially for domestic purposes.

It is suggested that the National Film Board undertake to produce entertaining pictures of an educational character to illustrate how coal is mined, how safety devices and regulations prevent accidents, and to impress the Canadian people with the importance in the economy of Canada of the consumer's dollar not only to the miners themselves but to eastern industries from whom



miners and others in the industry buy large quantities of consumer goods. The National Film Board should also undertake the production of motion pictures to illustrate the various uses of coal, not only as fuel, but as a source of chemicals and synthetic products. The background for such a production might well be the universities of Canada in which extensive research is conducted because this would give Canadian universities much-needed excellent publicity. Motion picture trailers such as those used extensively in theatres during war loan, Red Cross and other campaigns should also be distributed. These are matters which require federal action because the federal government alone has the facilities for such production and distribution.

The federal government should arrange through the Canadian Broadcasting Corporation for the preparation of continuity for production and presentation of actuality broadcasts, addresses and spot announcements throughout Canada.

The federal government should also conduct a continuous newspaper and periodical campaign in behalf of Canadian coal similar to campaigns conducted in the past in behalf of other Canadian products.

#### SUMMARY - MARKETS - FREIGHT - SUBVENTIONS

In the light of further practical experience since the Barrow Report was written, and present day conditions, it is held and here submitted that both the freight rate and subvention should be of an unquestioned and established nature. To effect improvement and stability in this important industry and to allow for desirable expansion as part of Canada's developing economy in the Post-war years, it is essential that there should be established by Statutory enactment a special and favorable freight rate structure for Canadian coal and that subventions be likewise placed on a permanent or semi-permanent basis.

It is further held that, since all the costs covering railway operations are available only to railways, that this Royal Commission should explore fully with the railways the



justification for the high basic freight rate on coal shipments to Ontario, and a complete examination of freight handling costs of coal be conducted in respect to present day conditions and to determine the possibility of rates more favorable to coal through the use of modern equipment and solid trains.

A publicity campaign conducted under the Dominion Government through newspaper, periodical, radio and other educational media would stimulate an interest in and create a larger Canadian demand for Canadian coal.

It is pointed out that a considerable market would be established were a national policy to adhere to the principle that Canadian coal be purchased always when payment is to be made with public funds.

It is advisable that a United States-Canadian reciprocal agreement be effected whereby Canadian western coal might freely move to Western United States points as against like importations of American coal to mid-Canadian points.

It is also to be noted from this section that, as a further justification for special treatment for Canadian coal, the present Dominion policy subsidizes United States anthracite coal to the extent of seventy cents per ton.





BY COMMISSIONER MORRISON - Anything in particular that you would like to point out in connection with that Table?

A. No, it is just a case of bringing clearly out the rates that are being charged, and the comparisons that are made there.

BY MR. FRAWLEY - Table 24 is all the subventions, Nova Scotia and the West?

A. Yes, it takes in the whole picture.

BY THE CHAIRMAN - You might suggest to the Province of Alberta that perhaps the Government of this Province, as well as the Government of Nova Scotia, should assist this coal in the way of getting it to market.

A. Yes, we have had different suggestions and recommendations made to the Government

BY THE CHAIRMAN - My two friends, and myself, will not like that because it will add to our taxation more specifically.

BY MR. TANNER - There is a supplementary part of this Brief that I would like to read, that shows the picture as far as the revenue available to the province in regard to the production of coal.

BY COMMISSIONER McLAURIN - To what extent can you expect to increase production by subvention? Can you get it up to a million? You might encourage new mines and get two million, and then perhaps three million, and then you may find Central Canada objecting to paying subventions because you have too much.

BY MR. TANNER - According to this submission, I think the statement is made that we could supply 100% more coal. And I think we should continue to develop our coal producing areas and mines to the point where it is economically right and in the interests of Canada to do so.

BY COMMISSIONER MORRISON - You are not suggesting that we open up more mines until there was a market available?

A. Definitely not.

Q. And the Government of the Province of Alberta would be opposed to the opening of new mines until there was sufficient market for those already in operation?

BY THE CHAIRMAN - How do you know you will get a market until you try?



BY COMMISSIONER MORRISON - We are dealing with first things first. My first name is Angus, and I was brought up in the school that taught that a bird in the hand was worth two in the bush.

BY MR. FRAWLEY - If I have a coal lease, why should I not be allowed to develop it if I have good coal there.

BY MR. TANNER - In answer to Mr. Morrison's question, I can truthfully say that we were opposed to the opening of new mines. I think we should take care of the mines that are opened, and we are in a position to supply twice as much if we could get good freight rates and subventions and a long term policy, so that we could get better organized mining, and if our men were sure of employment for a longer period we would be able to produce coal at a lower price per ton than we are today.

BY COMMISSIONER MORRISON - You open 10 more mines, and they were operating I think you said 4 or 5 days a week. If your Government allowed another 10 mines to operate 2 or 3 days a week, would you not be a long time, or going a long way around in getting a lessening in the cost of production.

A. That would be unwise, I think.

Q. Would not your cost of production go up, not only for the new mines, but for those in operation?

A. I think that would depend on the type of coal and method of mining, and then there may be markets available to a particular coal.

BY MR. FRAWLEY - The companies that are presently operating have no franchise on the coal business. You are sort of getting away from free enterprise if you start fencing those fellows in.

BY COMMISSIONER MORRISON - Mr. Frawley's Department, or his department of a few months ago, does not issue beer licenses at will to Hotels. They keep them within a reasonable limit to supply the requirements. And if that is true in that regard, Mr. Frawley should not have much quarrel with it in respect to coal mines.

BY THE CHAIRMAN - It is a different proposition altogether.





BY COMMISSIONER McLAURIN - We have come to a point where we cannot be too doctrinarian about free enterprise.

BY THE CHAIRMAN - I notice one place in your brief where you are rather hopeful that some day the coal producing provinces of this Dominion would be in a position to supply all the necessities of coal for Canada.

A. I was startled to read that sentence. I thought it had been deleted.

BY THE CHAIRMAN - That is a theory of the Province of Nova Scotia, that we at some day will be in a position to supply all the coal necessary for the Dominion of Canada. I am not saying they are right.

BY MR. TANNER - In this brief it was dealing with the fact that we had coal, but I don't think we have any argument in the brief that we feel we will be in a position, or should economically be asking to supply all the needs of Canada.

BY THE CHAIRMAN - I am glad to hear you say that.

A. As far as the physical assets go, I think it is quite possible.

Q. You mean you have the resources.

BY COMMISSIONER McLAURIN - Why not go whole hog and say we have the coal resources, they are inexhaustible, and we have the railways running east and west, why not go at it in a big way and exclude American coal?

BY MR. FRAWLEY - Have some real economic nationalism.

BY MR. TANNER - I could enjoy talking on that for a half hour, but it does bring up the question, I think, that we must determine as nearly as we can what is economically possible and beneficial to Canada. Is it better for them to have an exchange of goods and bring in some, coal being an important import, or would it be advisable to try and build up...

BY COMMISSIONER McLAURIN - I observed, I cannot say where, a series of correspondence between the State Department in Washington and our Department of External Affairs, protesting already as to the subsidy assistance given Canadian coals, and



we might take a good Canadian national outlook and say, we don't care what Uncle Sam says, but he might penalize us by not giving us any gasoline. So there is a point at which you cannot press this subvention very far, and we may have been very close to it in 1942 when we got 800,000 tons down there.

BY MR. FRAWLEY - Certainly that kept this subvention from being increased. You have to keep your eye on the American State Department when you talk about depriving the people of Ontario of that Ohio coal.

BY COMMISSIONER McLAURIN - Plus a certain part of Canada, which is not too happy about baby bonuses just now.

BY MR. FRAWLEY - Those are more of the fundamentals Mr. Tanner.

BY THE CHAIRMAN - If you could get all the assistance you needed from the Government, you could supply Canada's needs?

A. I think so.

Q. And that is really what these subventions are tending to?

A. I personally would not argue that.

Q. That is the tendency that those subventions have?

A. When we have twenty-three million tons approximately imported, and producing less than a million to supply Canada, then there is a long way between the two that we can go without pressing the point too far.

BY COMMISSIONER MORRISON - Without upsetting the apple cart. In other words that we get an equitable share of the market.

BY MR. DICK - A measure of the national fuel policy.

BY COMMISSIONER McLAURIN - Some say, wipe out tariffs and we will take a chance on our national market.

BY MR. FRAWLEY - And Mr. Gouge says, wipe out subventions and give us a good freight rate.

BY MR. TANNER - And have you explored that freight rate business.

BY COMMISSIONER MORRISON - We might send to your department for some additional explorers.

A. We will be glad to supply them.

BY COMMISSIONER MORRISON - Going back to that 70¢ a ton. Is that in effect on all coal imported into Canada? Or what does



it really mean? I saw some figures ther other day where there was over five million dollars, if I remember right, paid, as subsidy on American coal. Having in mind the large tonnage imported in recent years, the figure that you use of 70¢ does not seem as having been subsidizing all the tonnage to that extent?

BY COMMISSIONER McLAURIN - It is just anthracite. There would not be more than two or three million tons of anthracite come into Canada.

BY MR. TANNER - No, it would be less than two million tons.

BY COMMISSIONER MORRISON - A year?

BY COMMISSIONER McLAURIN - Yes.

BY COMMISSIONER MORRISON - But this was over a three year period.

BY MR. FRAWLEY - How much money?

BY COMMISSIONER MORRISON - Five and a half million dollars, roughly.

BY COMMISSIONER McLAURIN - I think you will find that that 70¢ is a straight price ceiling subsidy and it is improper to talk of it as a subsidy paid to 'anthracite' dealers of the United States. We needed coal and we had to pay the American price or we didn't get it, and if the Canadian price ceiling was to be maintained they had to put 70¢ in the pot.

BY MR. FRAWLEY - It ran into millions on petroleum.

BY COMMISSIONER McLAURIN - And a pretty sizeable figure on onions and lemons.

BY MR. TANNER - It figured out to be that on the anthracite coal.

BY COMMISSIONER MORRISON - What is your reference for this statement? As you left it this morning, I was not too clear.

MR. FRAWLEY - Mr. King said he would get the precise reference to that.

BY COMMISSIONER MORRISON - Mr. King is going to supply it. I would like to have the exact reference, and just what is meant by the statement.

BY COMMISSIONER McLAURIN - Before we go on, is there any place in which you specifically deal with a Central Selling Agency, what kind it should be, whether Government or voluntary, and so on?

A. Yes, there is a section here dealing with that.

Q. What under? It is so tied up with sub-ventions, and perhaps I am interrupting you unnecessarily.





A. I remember stating that. It does not come under standardization.

BY COMMISSIONER McLAURIN - No, I looked under that. What was in my mind, and I raised the question in Calgary. If we are going to have the Dominion Government pouring out \$2.50 to domestic, (I don't think it applies to bituminous so much because they sell in big orders) but in this domestic market I think we want to know what kind of Alberta coal, and if it is going to have \$2.50 paid by the Federal Government, I think they might stipulate that nobody gets the \$2.50 unless they are part of a central selling agency. You are completely out of the free enterprise field, and if this coal is going down and be a cushion for the Alberta industry, it is up to the Alberta operators to get busy and form such a selling agency, and show the nature and quality of the product, and I think they should keep away from the docks of Toronto. If Alberta did a good job in catching Timmins and Sudbury and so on, they would do plenty. If the operators cannot do it, they can accept a government functionary to do it; but it would be better to be a voluntary job.

BY MR. TANNER - I misunderstood you. We were dealing with setting up a place to store coal.

BY COMMISSIONER McLAURIN - But you should have a Central Selling Agency to cope with your natural market.

A. We don't deal with that in the brief. We do argue that the coal should be graded, and that the coal going from certain mines in certain areas should have the grade definitely established so that any purchaser would know the kind of coal he is getting.

BY COMMISSIONER MORRISON - By Government authority?

A. Yes.

BY COMMISSIONER McLAURIN - But our situation in the past is that we have people selling coal in Ontario and getting orders, perhaps the sales agent gives out calendars or pencils, and then Alberta does not produce the coal, or they produce an inferior grade of coal, and then perhaps they have to give away two calendars and two pencils the next year to get the customers.

A. There have been purchasers in the East who thought they were getting a certain grade of coal, and they didn't get it, and it reduced our markets materially.

BY COMMISSIONER McLAURIN - The Dominion Government might say, nobody gets in on this unless they are in a Central Selling Agency. If the operators won't form such an agency, then we will save the \$2.50 and get our coal from the United States or Nova Scotia.  
It might be very effective.



MR. DICK continues brief:

THE ECONOMIC IMPORTANCE  
of the  
Coal Industry in Canada

1. THE COAL INDUSTRY IN THE CANADIAN ECONOMY.

(1) Consumption of Coal in Canada  
(a) Aggregate Consumption

By 1921 the quantity of coal consumed in Canada exceeded 30 million tons. (Table 31). Consumption continued to increase and reached a maximum of 34 million tons in 1924. With the emergence of the depression in 1930 the amount of coal consumed declined to a low of 22 million tons in 1933. By 1940 consumption was back to 33 million tons.

TABLE 31. Consumption of Canadian and Imported Coal in Canada, by Quantities and Percentages, by Five-Years, 1886 - 1940.

YEAR	CANADIAN COAL SHORT TONS	p.c.	IMPORTED COAL "ENTERED FOR CON- SUMPTION"		GRAND TOTAL SHORT TONS	PER CAPITA SHORT TONS
			SHORT TONS	p.c.		
1886	1,595,950	45.9	1,884,161	54.1	3,480,111	0.758
1891	2,606,490	46.7	2,980,222	53.3	5,586,712	1.153
1896	2,639,055	45.1	3,206,456	54.9	5,845,511	1.140
1901	4,912,664	50.5	4,810,213	49.5	9,722,877	1.810
1906	7,927,560	51.7	7,393,906	48.3	15,326,466	2.425
1911	9,822,749	40.5	14,424,949	59.5	24,247,698	3.365
1916	12,348,036	41.3	17,517,820	58.7	29,865,856	3.717
1921	13,070,217	41.9	18,103,620	58.1	31,173,837	3.547
1926	15,086,296	47.7	16,565,555	52.3	31,651,851	3.349
1931	11,682,779	47.7	12,828,327	52.3	24,511,106	2.362
1936	14,508,642	53.3	12,719,515	46.7	27,228,167	2.469
1940	16,666,234	49.5	17,036,090	50.5	33,702,324	2.960

1940 figures from CANADA YEAR BOOK 1942 p. 309. Earlier Data from other Year Books.

BY THE CHAIRMAN: That doesn't look as if oil or electricity was undermining the use of coal?

MR. DICK: Well, we discuss that later on in the brief.  
(Continues brief):

Excluding periods of depression with idle men and resources, it appears that the capacity of the country to consume coal has remained fairly constant, at about 35 million tons, for the past 20 years.





(b) CONSUMPTION OF CANADIAN AND IMPORTED COAL

The quantity of Canadian coal consumed in Canada (coal mines' sales, colliery consumption, coal supplied to employees and coal used in making coke, etc., less the tonnage of coal exports) reached 12 million tons in 1916, and 12 million tons in 1921. (Table 31). In these years consumption of imported coal exceeded that of Canadian coal, imported coal providing for 58.7% and 58.1% of total consumption. Although the proportion of imported coal declined it remained over 50% until 1932. Canadian coal provided for slightly more than one-half of total consumption between 1932 and 1939, but fell below 50% in 1940.

While there have been variations over short periods of years, over the long period Canadian coal has supplied approximately 50% of total Canadian consumption.

(c) PER CAPITA CONSUMPTION

With increasing population and with industrial development, per capita consumption of coal increased continuously until the early twenties. Since then, the tendency for aggregate consumption to become stabilized has resulted in a moderate decline in per capita consumption. This decline was aggravated during the years of depression, and, following a low of 2.085 tons in 1933, per capita consumption increased to 2.960 tons in 1940 (Table 31).

It appears that, with the full utilization of resources per capita consumption is now approximately 3 tons, that, if past trends continue, per capita consumption will tend to decline slowly; and that, if population and industrialization do not increase more rapidly than over the past 20 years, the growth of population and industrial activity will no more than offset other factors making for a reduction in coal consumption and aggregate consumption will remain at approximately 35 million tons per year.



## (d) COMPETITION OF OTHER FUELS AND SOURCES OF ENERGY

Coal consumption has not increased with expanding population and increasing industrialization. This is largely due to more efficient utilization of coal and to increased use of other sources of heat and energy.

Between 1926 and 1941 hydro-electric horse power in Canada increased from 4,549,383 to 8,845,038 h.p., i.e. almost doubled. Over 81% of the installed capacity in 1941 was in Ontario and Quebec.

During the same period (1926 - 1941) the quantity of natural gas produced in Canada increased from 19,208,209 thousand cubic feet to 43,495,353 thousand cubic feet, i.e. more than doubled. In 1941 over 71% of the natural gas was produced in Alberta. Gas wells in Ontario produced 27%.

In the same period (1926 - 1941) the quantity of crude petroleum produced in Canada increased from 364,444 barrels to 10,133,838 barrels. The main increase occurred after 1936 (1,500,374 barrels). Production outside of Alberta is quite small.

The problem of coal should be considered in the perspective of the larger fuel problem. Natural gas and petroleum are exhaustible resources. The use of natural gas is limited to areas adjacent to producing fields; and concern is being shown over a prospective world shortage of liquid fuels. Even if additional sources of fuel oil are discovered extraction and distribution costs may be expected to rise; and prices with them. Hydro-electric energy may prove the most economical source of power in many locations; although in others coal will continue to have an advantage. However, there appears to be no immediate prospect of electrical energy displacing coal for heating purposes, or in transportation.

(1) Allcut says, "About 40 per cent of the energy derived from fuel is used as power, the remaining 60 per cent being employed

(1) E. M. Allcut. "A Fuel Policy for Canada." The Canadian Journal of Economics and Political Science. Vol. II, No. 1 Feb. 1945. pp. 26 - 34.





for heating purposes. Electrical energy is the cleanest and most convenient source of heat for buildings, but it has been pointed out in a recent paper (Huet Hassue, "Heating of Dwellings" Engineering Journal, July, 1943) that its employment is not economical or practicable for the following reasons: (1) the enormous amount of power required; (2) the large capital investment; (3) the seasonal nature of the demand - the maximum demand for heating coincides with the present maximum power demand, and there is practically no heating load during the summer months; (4) the high cost of heating (resulting from 1, 2 and 3), which is more than three times that of the present cost of heating from fuel."

While coal may become relatively less important as a source of power, its importance as a source of liquid fuels will increase if the prospective shortage of fuel oils materializes. Coal may be expected to retain its importance for heating, both of buildings and of materials in industry, and for railroad transportation.

(c) ACTIVITIES DEPENDENT ON COAL

The importance of the coal industry to Canada arises from the dependence of certain essential activities on a continuous supply of coal. Failure of the coal supply would disrupt the whole life of the country.

(i) Domestic Heating

Many Canadian communities are wholly dependent on coal for heating dwellings. The climate of Canada makes it essential that the supply of fuel to these communities be maintained without interruption.

(ii) Heating of Industrial Materials

Many of Canada's largest and most essential processing industries use large quantities of coal both for heating premises and in effecting the transformation of materials.

In 1939, the value of coal and coke used for heating purposes in Canadian manufacturing industries was \$35,893,686.





This was divided between the industrial groups as shown in Table 32.

TABLE 32 COAL AND COKE USED IN MANUFACTURING INDUSTRIES IN CANADA - 1939 (1)

Industrial Group	Coal \$	Coke \$	Coal & Coke \$
Vegetable Products	4,035,694	413,316	4,449,010
Animal Products	2,204,781	25,229	2,230,010
Textile & Textile Prod.	2,845,043	4,688	2,849,731
Wood & Paper Products	7,526,552	20,307	7,546,859
Iron & Its Products	4,489,291	309,187	4,798,478
Non-Ferrous Metal Prod.	5,007,855	2,773,535	7,781,390
Non-Metallic Mineral Products	3,128,838	1,263,809	4,392,647
Chemical & Allied Prod.	1,609,144	56,360	1,665,504
Misc. Industries	175,613	4,444	180,057

(1) Data from CANADA YEAR BOOK, 1942 p. 345

The most important industries using heat in the transformation of materials are: foundries and machine shops; brick tile, lime, and cement works; petroleum refineries; the glass industry; distilleries; food preparation plants; rubber goods industry; etc.

#### (iii) Steam Railroads

The steam railroads of Canada are the largest users of coal. Fuel consumption of railroad locomotives is shown in Tables 33 and 34. In Table 33 the total tonnage and total cost include all fuels. It is apparent from Table 34 that the consumption of fuels other than coal is relatively small. In 1943, 95%, by weight, of the fuel used was bituminous coal.

#### (iv) Industrial Power

Although hydro-electric energy has tended to supplant coal as a source of industrial power, many industries in Canada are now, and are likely to remain, dependent on coal for power. Industries which develop in localities distant from suitable sites for hydro development but close to deposits of coal find it advantageous to use coal rather than hydro power. In other cases, where heat is required in processing materials, the use of coal for both heating and power purposes has proven most economical.

It is evident from Table 35 that the proportion of total energy generated in hydro stations is high in those



provinces lacking in coal; and that in provinces with coal reserves a high proportion of total energy generated is derived from fuel stations.

Not all fuel stations use coal. In Alberta, for example, some fuel stations (e.g. Medicine Hat) use natural gas; and there are a number of small diesel plants. The amount of coal used in central electric stations in Canada is shown in Table 36. The amount of imported coal used in central electric stations is negligible. The reason for this is, of course, that fuel stations are generally located in provinces which are distant from sources of imported coal and/or possess substantial coal reserves.

## (2) THE SIZE OF THE COAL INDUSTRY

### (a) Coal in Comparison with Other Minerals

Coal may be compared with other minerals in terms of the gross value of production, as follows:

#### Gross Value of Production, 1941

Gold	\$205,789,392
Nickel	68,656,795
Copper	64,407,497
Coal	58,059,630
Asbestos	21,468,840
Zinc	17,477,337
Lead	15,470,815

### (b) The Coal Industry in Comparison with Leading Manufactures

In Table 37 the coal industry of Canada is compared with some leading manufacturing industries in terms of numbers of employees, capital invested, and net value of production.

By reason of its size in comparison with other industries the condition of the coal industry is clearly a matter of importance to the country.

## II. THE COAL INDUSTRY IN THE ECONOMY OF THE PROVINCE OF ALBERTA

### (1) ALBERTA AND THE CANADIAN COAL INDUSTRY

In 1941, coal produced in Alberta amounted to 6,969,962 tons, and represented 38.3% of the 18,225,921 tons produced in Canada (Table 38). The gross and net values of production





and the capital invested in Alberta exceeded one-third of the Dominion totals. Number of employees and salaries and wages paid were slightly less than one-third of the corresponding amounts for Canada.

(2) THE COAL INDUSTRY IN AN AGRICULTURAL PROVINCE

Agriculture is still the most important industry in the Province of Alberta, and the welfare and stability of the Province depend largely on the income of agriculture. In the past the farm income of the Province has been highly variable. (Table 39). The farm income in 1932 was little more than one-tenth of the income in 1928. Between 1941 and 1942 farm income almost trebled. In 1943 it dropped back to practically one-half the amount of 1942.

(1)

TABLE 39 ALBERTA NET FARM INCOME

<u>YEAR</u>	<u>FARM INCOME</u>	<u>YEAR</u>	<u>FARM INCOME</u>
1926	\$114,500,000	1934	\$45,700,000
1927	115,700,000	1935	48,900,000
1928	155,900,000	1936	52,300,000
1929	119,100,000	1937	75,500,000
1930	39,200,000	1940	92,503,000
1931	18,700,000	1941	88,869,000
1932	16,600,000	1942	235,636,000
1933	19,400,000	1943	128,662,000

(1)

DATA FOR YEARS 1926 - 37, FROM "NATIONAL INCOME" APPENDIX 4 REPORT OF THE ROYAL COMMISSION ON DOMINION-PROVINCIAL RELATIONS

(2) DATA FOR YEARS 1940 - 43 FROM "NET FARM INCOME, CANADA, 1940 to 1943" QUARTERLY BULLETINS OF AGRICULTURAL STATISTICS, APRIL - JUNE 1944.

Such irregularity inevitably places local institutions and activities under a severe strain; and greatly magnifies the problems of provincial administration. The problems arising out of irregular farm income are relieved by the presence of other industries not subject to the same irregularities. By reason of its size the coal industry of the province, if able to operate steadily, would have a significant stabilizing effect.

(3) THE COAL INDUSTRY IN COMPARISON WITH LEADING MANUFACTURES

Coal mining may be compared with leading manufacturing industries in the Province, in terms of numbers employed,



capital invested, and net value of production (Table 40).

It will be seen that, in 1941, the numbers of employees and the capital invested in coal mining exceeded the comparable amounts for the five leading manufacturers together.

TABLE 40 COMPARISON OF COAL MINING WITH SOME LEADING  
MANUFACTURERS, ALBERTA, 1941

	Net Value of Production	Capital Invested	Employees
Slaughtering & Meat Pack	7,485,729	11,628,072	2,630
Petroleum Products	5,427,893	6,574,472	455
Sawmills	3,085,652	2,923,893	2,196
Butter & Cheese	3,056,206	4,972,705	1,198
Flour & Feed	2,951,855	8,193,155	793
5 Leading Manuf. Indus.	22,007,335	34,292,297	7,272
Total Manufact. Indus.	48,474,606	95,676,318	16,761
Coal Mining	16,152,059	36,763,515	8,068

#### (4) ACTIVITIES DEPENDENT ON COAL

From information provided elsewhere, it is evident that, excluding the railroads, Alberta's domestic market does not absorb any large proportion of the provincial output. However, many important activities within the province are dependent on an assured and continuous supply of coal.

##### (a) Heating Buildings

Alberta coal must compete with natural gas as a fuel for heating buildings. This limits the amount of coal used for this purpose. However, a substantial proportion of householders use coal to heat their dwellings and gas is only available in restricted areas.

##### (b) Central Electric Stations

The installed horse-power capacity in steam plants in the province exceeds the hydro-electric horse-power. The City of Edmonton operates a municipal steam plant; with a standby and exchange agreement with the Calgary Power Company which distributes hydro power. A steam plant at Drumheller serves the city of Drumheller, and the energy for a transmission system servicing a number of towns and villages in the area east and north of the city. Failure of the coal supply at these, and other points throughout the province, would cause great hardship, inconvenience and loss.





(c) Dependent Industries

Alberta's leading industries are engaged in the processing of raw materials of farm and forest origin. The quantities and value of coal used, by industrial groups, are shown in Table 41.

The Slaughtering and Meat Packing Industry and the Butter and Cheese Industry are two of the leading industries listed in Table 40. The coal used in these industries is shown in Table 42.

BY THE CHAIRMAN: Just one question I was going to ask there: Electric power is not under a public utility in this province, or is it?

MR. DICK: The distribution is; the same way as the Natural Gas Company come under the Public Utilities Commission.

BY THE CHAIRMAN: Well now, don't you think that more could be done, I would say by the Province, in electrifying areas, not only small villages but the country itself with electric power from coal?

MR. DICK: Well, the Government have already formed a Power Commission and I understand they have had two or three experiments in bringing it to the farm, and they are investigating that at the present time.

BY THE CHAIRMAN: Have you made any estimate of the comparative requirements of coal for electric power now and when you get your system working?

MR. DICK: I don't think so. As a matter of fact it is quite possible--well, it is what the tariff will bear. I mean, it costs so much money to distribute power to farmers--if you like, your local industries--and it is just a question of whether they can stand the tariff or not, or how much assistance would be required for them to do it. (Continues brief):

INTERPROVINCIAL RELATIONS

The Case for a National Fuel Policy

Alberta, in common with other coal producing provinces,





has claims against the Dominion on the basis of economics due to the unequal incidence of the protective tariff policy commonly known as the National Policy.

Manufacturing is largely concentrated in Ontario and Quebec constituting more than 81 percent of the total manufacturers in Canada in 1941. (See Canada Year Book 1943-44, pp. 413-414).

Alberta with 13 percent of the population of Ontario and Quebec produced less than 3 percent of the value of manufactured goods produced in Ontario and Quebec.

The balance of trade flowing between the east and the west is difficult to determine but the prairie provinces mainly ship agricultural products eastward, largely for export. In return Ontario and Quebec ship manufactured goods to the west. These are largely protected by tariffs and often high tariffs with the result that the farmer and coal miner pay the enhanced price due to the tariffs.

It is assumed that the manufacturers in Ontario and Quebec require this tariff protection or their industry cannot exist. The tariff is a bounty or subsidy and the cost of it is paid by the consumer of the manufactured product.

The national policy was established for the purpose of benefitting no particular province but to benefit Canada as a whole.

The fact that manufacturing is largely concentrated in Ontario and Quebec is due to many advantages possessed by them such as cheap water power, large centre of population, proximity to American coal mines etc.

The fact remains, however, that this condition causes the west to suffer a disability brought about by Dominion legislative action at a time when the Province of Alberta did not exist. Under confederation there were to be equal rights for all provinces and special grants to none.

Professor Norman McL. Rogers, then economist at Queens University and later Minister of Labour and National Defence,



made a complete study of the tariff in Canada and the effect of the incidence of the tariff in the different provinces. (See brief "A Submission on Dominion-Provincial Relations and the Fiscal Disabilities of Nova Scotia within Canadian Federation," Province of Nova Scotia, 1932).

The following table gives the net loss or gain of the different provinces omitting as irrelevant for the purpose of this comparison the figures for Prince Edward Island, Nova Scotia and New Brunswick.

1931 Figures	Benefit from Tariff	Cost of Tariff	Net loss or gain	Loss or gain per capita
Quebec	\$132,867,447	\$101,171,562	31,695,885	/\$ 11.03
Ont.	220,722,484	168,732,723	51,989,761	/\$ 15.15
Man.	19,910,971	29,185,740	--9,274,769	--13.25
Sask.	3,275,950	29,228,285	--25,952,335	--28.16
Alta.	8,211,148	27,909,396	--19,698,243	--26.93
B.C.	22,378,571	37,737,247	--15,358,676	--22.33

It will thus be seen that while Quebec and Ontario made a per capita gain of \$11.03 and \$15.15 respectively, all four western provinces indicate a per capita loss, in the case of Alberta as high as \$26.93.

While these are relative and average figures based on an average duty it is believed that the actual figures would be higher due to the fact that the goods that Alberta purchases from Ontario are highly manufactured goods under heavy protection.

"The Alberta Natural Resources Commission received evidence bearing on this point; for instance, in 1930 the products of Canadian manufacturing industries in Quebec and Ontario were over \$2,700,000,000 or 80 per cent of the whole Canadian output, while the prairie provinces only manufactured \$300,000,000 worth, or 9 per cent; and the market for goods manufactured in Quebec and Ontario is admittedly largely in the Western Provinces. Evidence was also submitted to that Commission indicating in the case of individual firms manufacturing, e.g. agricultural implements, clothing, boots, etc. in the East, how large a proportion of their output was purchased by the Prairie Provinces. The proportion has been suggested to be as high in cases as 60 per cent; it must be borne in mind that the coal mines in the west are themselves heavy purchasers of eastern machinery, explosives and equipment." (p. 45, Barlow).





It is evident from the foregoing that the farming and mining industries of Alberta are paying a subsidy in the form of the tariff to Ontario and Quebec amounting to nearly twenty million dollars annually and it is only right that assistance should be granted by the Dominion Government to assist the coal mining industry of Alberta.

#### SUMMARY

(1) Measured in terms of capital invested, net value of production and the employment it provides the coal industry ranks among the large Canadian industries. The conditions in the industry are therefore clearly a matter of national concern.

(2) Production of coal is largely concentrated in the Provinces of Nova Scotia and Alberta, and the functioning of the economics of these two provinces is materially affected by conditions in the coal industry. Alberta is still predominantly an agricultural province. In the past the income of agriculture has proved highly variable. Faced with these conditions a prosperous and stable coal industry could contribute significantly to the general economic stability of the Province.

(3) The relative size of the coal industry in Alberta is indicated by the fact that, in 1941, both the number of employees and the capital invested in the coal industry exceeded the employment and capital in the five leading manufactures combined.

(4) While the domestic market in Alberta does not absorb any large proportion of the provincial production, many important activities, including domestic heating, central electric stations, and industries processing raw materials, are either partly or wholly dependent upon an assured and continuous supply of coal.

(5) Coal has been essential to industrial development in Canada. The expanding use of hydro-electric power has reduced dependence on coal as a source of power. However,



electrical energy does not yet appear to be a practical substitute for coal for heating purposes; and the importance of coal as a source of liquid fuel will increase greatly as the prospective shortage of such fuels materializes. The problem of coal should be viewed in the perspective of the larger fuel problem.

(6) The national importance of a continuous and assured supply of coal has been recognized. Because of its indisputable contribution for heating purposes many of Canada's most important industries and activities are dependent upon coal; and the railroads must continue to rely largely on this fuel. Stoppage of the coal supply would result in immense hardship, inconvenience and loss. Uncertainty is only relatively less serious.

(7) In view of the fact that the agricultural and mining industries in Alberta are paying a subsidy in the form of tariffs to industries in Ontario and Quebec, amounting to nearly \$20,000,000 annually, it is only right that assistance should be granted by the Dominion Government to assist the coal industry of Alberta.

#### COAL STANDARDIZATION

It is axiomatic that standardization of a product is essential to good marketing and satisfied customers. In other words, a standardized product will displace an unstandardized product in a competitive market. Nevertheless, standardization has made little progress in the coal industry of Canada. One obvious explanation of this condition is the difficulty of the task; nevertheless it must be admitted that much more progress could and should have been made than has been made.

Many articles can be manufactured to exact specifications; and even such agricultural products as wheat, apples, etc. can be standardized by comparatively simple sampling, and inspection; but even if standards of coal were set up, sampling



and inspection to show that shipments were up to standard would prove a difficult and costly task. Two separate sets of standards will be discussed below, standardization by quality and by size; and methods for the establishment and maintenance of these standards will be suggested.

Standardization by Quality. No such standardization has been even attempted in Canada and no clear example of standardization can be cited abroad. Canada, however, can, and has need to pioneer. Many large consumers do draw up specifications for the coal they purchase, and arrange for bonuses or penalties according as to whether delivery is above or below specification. The many small consumers can have no such protection. In 1928 an Alberta Coal Standards Board was set up, to consider the shipment of coal to Ontario. The board, after careful study, recommended certain coals as suitable for shipment but they had no power to do more than recommend, and the Board lapsed after making its report. Other provinces also may have attempted action, but the Alberta Board illustrates the situation; a province can control the industry in its own territory, but cannot control shipments to other provinces. Joint Dominion-Provincial action is required. It might be suggested that any province could control the coal sold in that province; but the shipping province has the greatest incentive to maintain high standards and is in the best position to establish and control them, if given the necessary authority.

Coal is not uniform in quality throughout its substance; pieces of floor, of roof or of partings may be included in the shipment, often firmly attached to the clean coal. The different sized pieces may carry different amounts of impurities, and the fines included in the shipment, or formed in transit, frequently differ notably in quality from that of the larger pieces. Coal also becomes segregated in sizing during loading and shipping. It is therefore hard or impossible to obtain a sample that is certain to be representative of the whole ship-





ment without taking as sample a notable percentage of the whole consignment. This gross sample then requires to be carefully cut down and pulverized, after which analysis is made. In brief, sampling and analysis of individual shipments can only be difficult and costly if it is to be reliable. It can therefore be stated that standardization should be planned to require the minimum of sampling and analysis.

Standardization of Size. This is a simpler matter than standardization of quality. Some progress has already been made in Canada, and in other countries standardization of size is accepted practice.

Specification for coal No. 18-G.P-1 1940, of the Canadian Government Purchasing Standards Committee includes certain size specifications for coals purchased by the Government; and the Wartime Prices and Trade Board Administrator's Order No. A-289, July 11, 1942, contains regulations "Respecting the Grading of Coal Mined in the Province of Alberta". Surely any purchaser of "nut" coal, for example, should be entitled to receive the same size of coal, wherever mined and wherever delivered in Canada and no present regulations ensure this.

The greatest handicap to standardization in the past has been the individualism of many operators, but the argument has been advanced that different operators use different types of screens and that it would involve heavy expense if they were required to instal a uniform type of screen. Actually this is not necessary; the Research Council of Alberta has shown that equivalents can be determined. Thus for certain coals the product passing through a 1 3/4" and retained on a 1 1/8" bar screen will be practically identical/<sup>in size</sup> with coal passing a 3" and retained on a 2" round hole screen. The equivalents vary somewhat with the type of fracture of the coal, and equivalents must be determined for the different fracture types and for all screen types in common use. This will require considerable work but the cost of this will be trivial



when measured against the advantage to be gained.

Size standards, with complete tables of accepted equivalents, could be set up for the whole of Canada; and operators could then be allowed ample time to adjust their existing screening plant to the required sizes for the different size grades of coal they proposed to sell. The cost to any operator would not be serious.

One difficulty about size standardization is the fact that the coal always undergoes more or less size degradation between the operator's screens and consumer's bin, and it is hard to place the fault if a delivery is unsatisfactory as to size. Some dealers remove the fines from the coal they sell before delivery to the consumer. This practice might be encouraged by authorizing such coal to be marked as "rescreened by dealer".

Coal for domestic use is greatly preferred when free from dust. This is achieved by spraying the screened coal with oil or dedusting solutions. In competitive markets particularly, provision should be made for an additional grading which might be known as "dedusted".

Elsewhere in this brief it is indicated that it would facilitate the marketing of Alberta coals if storage plants were erected at Toronto, and other large distribution centres, where dealers would go to get loads of coals as required for delivery to their customers. Such storage plants might be used to simplify the maintenance of high standards of quality for Alberta coals. The storage plant would only buy coal from operators who could supply, and who did supply, coal of the required quality.

Coal storage plants would normally be equipped, in addition to loading and unloading facilities, storage bins, weigh scales, etc., with facilities for screening or rescreening coal, for taking, crushing and reducing samples to be sent to an analyst, for the oiling or other dedusting treatment.

It is suggested that the storage plants should be operated by pools of interested coal operators.





BY COMMISSIONER MORRISON: That is your central selling agency.

MR. DICK: That's right. (Continues brief):

SUMMARY

Standardization of coal, by quality and size, should be established under provincial boards with power to act under authority granted by the Dominion Government or by joint action of the Dominion and Provincial Governments as found to be legally necessary.

Size standards would be uniform throughout Canada, but control should be enforced by the provincial boards.

Experiments should be conducted to establish equivalents for different kinds of screens and types of coal fractures. Storage plants, if erected at large distributing centres, could be used to facilitate standardization of both quality and size.

BY MR. FRAWLEY: You say control should be enforced by the provincial boards. I don't quite understand that. You point out on the first page that that is practically impossible, because you say, "A province can control the industry in its own territory, but cannot control shipments to other provinces."

MR. DICK: Only through joint action between the Dominion and Provincial Government.

BY MR. FRAWLEY: So that the control should be exercised by provincial boards, but you want to add, by co-operation between Provincial and Dominion Governments?

MR. DICK: Yes. (Continues brief):

COAL UTILIZATION

The coals of Alberta are geologically young, and might be expected to be of 'low rank', that is to be but slightly metamorphosed from the original peaty deposits. Actually the high pressures involved in the formation of the mountain ranges to the west have resulted in places in a high degree of meta-



morphism - thus such high rank coals such as semi-anthracite and high grade bituminous coals, etc. are found. In general the rank of the coal is high in the mountains, less in the foothills, and gradually decreases east from the mountain face. All the coals are notably low in sulphur.

The division of the coals of the province into five groups, each with special qualities related to utilization, is given under 'Classification'; and the geographical distribution of the five groups is shown in a map.

Many features of the utilization of coal are common to the whole Canadian coal industry, and in fact, to the world coal industry. Utilization, however, is outlined here as a basis for the following description and explanation of conditions which are peculiar to Alberta or are of particular interest to Alberta.

The utilization of coal may be roughly grouped under five main divisions as follows:

Division 1. The combustible matter of the coal is completely burned with an excess of air. The resultant product is heat and, secondarily, power. Coke or char, from division 4, may be used instead of coal as the raw material.

Division 2. The combustible matter of the coal is completely gasified by partial combustion with a limited amount of air, or of air and steam, or of oxygen and steam. The resultant product is gas, to be used either as a source of heat or power, or as a raw material for the production of more valuable products. Coke or char, from Division 4, may be used instead of coal as the raw material.

Division 3. The combustible matter of the coal is largely or completely liquified - with some gas as a by-product - by treating the coal with hydrogen at high temperature and pressure. The type of products can be varied by selection of coal and by modification of operating conditions.

Division 4. The volatile matter of the coal is vapourized by the application of external heat, in the absence of air - or



in a strictly limited supply of air. The primary products obtained are coke (or char), coal tar and oils, a watery product, and gas. Some or all of these may serve as raw materials for the production of heat, power, gas and of a vast number of other products.

Division 5. The coal is extracted with solvents, either inorganic or organic, to obtain products which are themselves valuable or are valuable as raw materials for secondary products.

These five divisions will be considered separately, with special reference to Alberta. One feature, however, is common to at least four divisions; Alberta has large developed or potential resources of water power, of natural gas and of petroleum. The utilization of coal in Alberta has been retarded by the competition of these other resources.

The greatest obstacle to the development of coal mining in Alberta, however, has been the distance of the coal fields from the large market in central Canada.

Division 1. Complete combustion for production of heat or power

All five groups of Alberta coals are so utilized. Certain difficulties hinder or limit their wider use. Thus the fines of Group I, being non-coking, many be lost through the grates or up the smoke stack of industrial furnaces. Briquetting is employed to overcome this difficulty. Group II coals may require washing to reduce the weight of inert matter to be shipped, and to permit sale in a competitive market. Their coking character, and smokiness render them unsuited for use in most of the domestic heaters in present use.

Groups III, IV and V have lower heat values, which limits the distance to which they can be shipped; but the free-burning, smokeless character of Group IV makes it a good domestic fuel. It is not a good storage coal, however, the ash tends to clinker, characteristics which hinder its sale. Group V coal is mainly sold for local markets.





Custom briquetting and washing plants, suitably placed, are worth consideration. These could be larger and more efficiently operated than plants at individual collieries. The use of blended coals for briquettes, resulting in reduced binder and improved firing qualities, would be facilitated; and the erection of a steam power adjacent to a washing plant would permit the economic production of a cleaner coal.

#### Division 2. Complete gasification of coal

Any coal in Alberta could be used to make either a low heat value producer gas or a high heat value water gas. However, for many purposes, particularly where a tar-free gas is required, it is customary to use coke or char instead of raw coal as the fuel.

At present little if any Alberta coal is used for gas making, but there is a large potential market in the near future. Gas is now used for the manufacture of such widely different products as methyl alcohol, ammonia and gasoline, and the number of such products is certain to increase. At present a gas made from natural gas is frequently employed - as for example in the Alberta Nitrogen Products plant in Calgary - but coal may capture the market. The supply of natural gas in any field is limited, and even now industry would hesitate to erect any plant based on natural gas, and involving high capital expenditure, unless there were an assured supply of coal available to replace the natural gas when needed.

It is possible, however, that even in the immediate future gas suitable for synthetic processes may be made more cheaply from coal - directly or indirectly - than from natural gas. Processes have been devised, but it is certain that they can be improved and adapted to Alberta coals. Large scale experimentation is urgently needed. This should certainly be carried out in Alberta before there is shortage of natural gas; and before interests, competitive with coal, can obtain control, through patents or otherwise, of the production of



synthetic gas - commonly called water gas. Alberta has coals of many varieties; it is probable that by suitable selection of coal and process a cheaper gas may be made than could be made where the process must be suited to a particular coal.

### Division 3. Hydrogenation of coal

A comparison of the ultimate analyses of coal and of petroleum reveals that the most notable difference is the higher hydrogen content of the petroleum. It may also be noted that if hydrogen were added to a low rank coal, with elimination of the contained oxygen as water, its chemical analysis might become that of a high rank coal. It is therefore natural to find that coal can be converted into a liquid product by treating it with hydrogen at high temperatures and pressures in the presence of a suitable catalyst. It is also natural to find that low rank coals, by a partial hydrogenation involving lower temperatures and pressures, can be converted into a high rank coal with coking character.

Any Alberta coal can be hydrogenated, but high rank coals are only treated with difficulty, and give poor yields. The low rank, high oxygen content coals on the contrary are easily treated, but involve a high hydrogen consumption. The usual practice elsewhere for the manufacture of gasoline is to treat the coals of Group II and it may be assumed that in Alberta the same coals would be preferred. It is usual to select a coal that may, by suitable cleaning, be reduced to a very low ash percentage.

The degree of hydrogenation may, as suggested above, be varied to give different products. Early plants in Germany and England made gasoline as their main product, and such plants can only operate economically on a large scale and involve very high capital expenditure. A modern trend is towards a lesser degree of hydrogenation, with lower capital and operating expense, to give a cheap bunker fuel oil, or to give phenols, tar acids, etc. for use in the manufacture





of plastics. Somewhat lower rank coals might then be treated.

It is anticipated that only the latter type of plant has economic possibilities in the near future in Alberta. Large scale experimentation, such as only the Dominion Government could finance, is required, and it obviously would be desirable that such a plant should be erected in Alberta where the widest range of coals for test is available, and where a cheap gas for the manufacture of hydrogen is also available.

#### Division 4. Carbonization

Carbonization is commonly classed as high temperature or as low temperature; but an intermediate temperature is sometimes recognized as a separate class. Carbonization may be undertaken with the manufacture of coke as its prime object; and the gas, tar, etc. regarded as by-products; or the gas may be the prime object, with coke included with the by-products. Some carbonization plants are operated with, and others without, recovery of by-products. Thousands of carbonization processes, retorts, etc. have been devised, and many of these have been developed to successful commercial operation. High temperature carbonization has for many years been a large scale, well established industry; but low temperature carbonization has had a chequered career and is still only operated in a few places and on a comparatively small scale. Nevertheless, for Alberta coal, in the near future, low temperature carbonization appears to have greater possibilities.

Alberta now has some beehive coke ovens - high temperature, without by-product recovery - and a small market for coke and gas manufacture outside the province.

High temperature coke ovens, with by-product recovery, are operated at a profit in many parts of the world, and produce coke, gas tar, ammonia liquor, etc. The relative amounts of these different products can be varied, by change of conditions, but only within limits. In general, good markets must be available for all of each of the products, and



a plant of this character in Alberta would face many handicaps. There is no large market in the province for metallurgical coke, and a domestic coke would face competition with the many smokeless domestic coals mined. The gas would face competition with cheap natural gas that has a notably higher heat value. The tar, as a fuel, would face competition with natural petroleum, and there is no suitable market, or marketing conditions, to permit the establishment of a coal tar industry, and the ammonia would face competition with a cheap synthetic product made from natural gas and air.

BY MR. FRAWLEY: That is pretty pessimistic, but it is probably better to put the trouble down.

BY COMMISSIONER McLAURIN: It is realistic.

MR. DICK continues brief:

Although, as stated above, it would be difficult to start a by-product carbonization industry in Alberta under present conditions, there is no reason why Alberta should not supply coal to the plants already established, or to be established, in Winnipeg and elsewhere to make gas and coke for the domestic market. Some positive action may have to be taken, however, to overcome the plant operators preference for the American coals they have been accustomed to use.

To hold this carbonization market for Alberta the coal operators must be prepared to supply a special low-ash coal. Also, as frequently two coals can be blended to give a better coke than that from either coal coked alone, large scale experiments should be made to study the blending possibilities, for carbonization, of different Alberta coals.

The by-products of low temperature carbonization are less well known, and in general have less value, than those of high temperature carbonization. It is reasonable to expect that research will develop their value, but an industry can not be established upon expectations. Low temperature carbonization of coking coals involves many technical difficulties;



but there does seem to be good possibility for cheap carbonization processes, without by-product recovery, taking advantage of the non-coking character of Group III, IV or V Alberta coals.

The product will be a char, not a coke; a product bearing much the same relation to the original coal that charcoal does to wood. This char is small in size, light, and not very strong, but it has a notably higher heat value than the original coal and is a clean, smokeless fuel.

There are several potential markets for the char. It may be used for automatic domestic stokers, or blowers; it may be used instead of charcoal as a fuel for portable gas producers on motor vehicles, it may prove a good fuel for the manufacture of water gas, or it can be briquetted as a domestic fuel. In the ordinary methods of briquetting the added binder converts the smokeless char into a slightly smoky briquette, but secondary treatments are now being investigated to give a smokeless product.

The Research Council of Alberta is now investigating methods and processes along the lines indicated. One requisite for reaching distant markets with the fuel will be a ruling that it shall be shipped at the same freight rate as coal. One difficulty that can be overcome is to adapt the use of the fuel to the clinkering tendency of its ash.

#### Division 5. Solvent extraction of coal

It has long been known that most coals are partially soluble in certain solvents, both organic and inorganic. The degree of solubility varies widely both with the coal and with the solvent. Recently, however, many investigations have commenced looking to the possibilities of solvent extraction to give products of value as raw materials in the numerous new chemical industries which are being started. Another recent development is the use of solvent extraction in the preliminary stages of the hydrogenation of coal.





Some years ago the Research Council of Alberta made some preliminary determinations of the solubility of typical Alberta coals in organic solvents. Some of those tested showed reasonably high solubilities. Other tests on the solubility of Alberta coals in caustic alkali showed that some of the coals of Group IV and V were notably soluble. Further tests with Alberta coals are undoubtedly needed, particularly with Group IV and V coals which do not seem to be the type of coals studied elsewhere. There are reasonable possibilities that intensive work on solvent extraction might lead to the establishment of chemical industries in Alberta.

4.00 P.M. - COMMISSION ADJOURNED



ROYAL COMMISSION ON COAL

Edmonton, Alberta, April 17th, 1945.

VOLUME XXVIII

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ROYAL COMMISSION ON COAL

Edmonton, Alberta.  
April 17, 1945.

The Commission convened at the Court House at  
10:00 o'clock A.M. on Tuesday, April 17th, 1945.

PRESENT:

Hon. Mr. Justice W. F. Carroll, Chairman  
Hon. Mr. Justice C. C. McLaurin, Commissioner  
Angus J. Morrison, Esq., Commissioner  
J. J. Frawley, K.C., Commission Counsel  
Robert D. Howland, Secretary.

MR. N. E. TANNER (Continues Brief, Ex. 136).

"COAL RESEARCH

Research investigations for the betterment of the Canadian coal industry should be designed to give the most economical utilization of the nation's fuel reserves. They should be planned as a long term policy and should be undertaken jointly by the Dominion and the Provincial governments under guidance of liaison committees. Three liaison committees, at least, would be required - one for mining and geological problems, one for scientific and technical problems and one for economic and marketing problems. The coal operators, coal consumers, industrial organization and manufacturers of coal-mining and coal-burning equipment should be organized and take an active part in sponsoring the research investigations.

The investigations should be divided - the Dominion handling, in general, those which have country-wide significance; the Provinces doing work that has specific application to its own coals, and the Industry, working co-operatively, specializing on mining problems and on work leading directly to technological developments. Although certain matters such as health and safety of miners are definitely a Provincial responsibility, it does not necessarily follow that the research work thereon might not better be undertaken by the Dominion, as many of the problems apply equally to all the Provinces.



The research work should include pure and applied research, and also economic research on the commercial feasibility of various projects. Most problems can be handled on a laboratory scale, but some are of such a nature that they can only be solved in large scale operations. Investigations such as coal cleaning, hydrogenation, carbonization, etc. which require heavy and expensive commercial equipment should be done by the Dominion. Coal operators and machinery manufacturers could work in cooperation with government engineers in some important problems which could not otherwise be undertaken because of excessive cost.

Some of the problems calling for research are listed below under separate headings. Although in some cases it is clear that particular problems are Provincial or even more local in character, the final decision as to allocation, to Dominion, Provincial or Industrial effort, should be left to the liaison committees recommended above.

#### Coal Reserves.

The aim in investigations on mining should be the development of improved methods, both for underground and stripping operations, in order to improve output, minimize costs and increase safety. These investigations must largely be done in actual operations and in cooperation with mine owners and equipment manufacturers.

#### Chemical and Physical Studies of Coal.

Because of the complexity of coal, studies of its physical characteristics and chemical constitution are becoming of increased importance in order that pertinent information be made available for the newer developments in coal combustion and coal processing. These studies include: methods for collecting representative samples from mines and from commercial shipments; methods of analysis; physical tests of hardness, grindability, pulverizability, density, bulk weight, storage; determinations of the sizings of coal suitable for combustion under different conditions; ignitability and reactivity of coal and coal products;





the nature of volatile matter; ash - its fusion and slagging characteristics; loss of combustible - through grates, as fly-ash and as smoke or soot; solubility of coal in organic or other solvents; and many other similar studies fundamental to the most efficient utilization of coal and leading to the establishment of new chemical industries.

Most of the above are laboratory scale investigations and are now being studied by the Research Council of Alberta, the Bureau of Mines, Ottawa, or by industrial organizations, but this work should be greatly increased.

#### Preparation.

Research should be undertaken looking to preparation for the market, of coal of uniform size and quality at a reasonable cost and with the least loss of combustible matter. Such investigations should include studies of coal breakage; mechanism of separating coal from its impurities; cleaning and processing of the finer sizes of coal; methods for dedusting coal; standardization of sizes for different grades of coal and standardization of quality grades; comparison of sizing attained by different methods of screening and efficiency testing of existing coal cleaning plants.

Most of these problems are large scale and would require to be done by the Dominion government or done in co-operation with mine owners.

#### Storage of Coal.

Coal in storage undergoes deterioration and is liable to spontaneous combustion, yet it is necessary to stockpile large quantities of coal.

Investigation in this field should include the storage qualities of various coals; method for safe stock-piling of coal and fundamental studies of the mechanism of oxidation of coal.

#### Combustion of Coal.

Since the major part of coal consumed is burned in the raw state to produce heat and power a knowledge of the fundamental reactions upon which combustion depends is important. Equipment



should be developed for the efficient and smokeless combustion of different coals. This equipment should include furnaces, automatic stokers, power equipment and railway locomotives, etc. The burning characteristics of different ranks of coal are very different and it is imperative that the equipment be designed for the particular rank of coal if it is to give efficient performance and satisfaction. Efficiency tests of thermostatic and manual controls should also be made under operating conditions. Many problems connected with pulverized coal firing require solution.

#### Processing of Coal.

The processing of coal is becoming increasingly important to the coal industry and is a fertile field for research. Researches should include investigations in high, medium and low temperature carbonization of coking coals; low temperature carbonization for non-coking coals; briquetting of coal with or without binder; gasification of coal, coke or char; production of liquid fuels from coal by hydrogenation or synthesis; production of plastics and chemicals; etc. Some of these are discussed in greater detail in the section on the utilization of coal. Aggressive research along the above lines may help coal to gain or regain coal markets.

#### Research Information

The formation of a research information bureau is recommended for coordination of the results of research from different laboratories and for the compilation and condensation of all data pertaining to subjects of interest to the coal industry.

The researches mentioned are collected here in little more than skeleton form but many of the more important ones are discussed in other portions of this brief. A more detailed explanation of the researches which should be prosecuted more intensively are given in a paper "Research and the Coal Industry in Canada" by W. A. Lang, presented to the Canadian Institute of Mining and metallurgy, April 1945. A copy will be attached hereto."

BY MR. TANNER - This paper is not yet prepared, so it will have to be forwarded at a later date.





MR. TANNER (continues brief)

"Organization of Research.

Coal research in Canada has heretofore been largely confined to work in Dominion, Provincial and University Laboratories. It is now urged that the time has come for the industry itself to organize cooperative investigations. Such work would normally be of a more technical character and on a larger scale than the work in the above laboratories."

BY COMMISSIONER MORRISON - Mr. Tanner, at that point, if you believe that the industry should organize itself for cooperative investigation, would it follow that you also believe that cooperative marketing might be in the interests of the industry? If a little cooperation is good for the industry in the matter of research, would it not follow that a little cooperation might be good for the industry in the matter of marketing?

A. Yes, I would say that that might well follow; and the question was asked yesterday if we had included in our brief a definite recommendation that there should be a central selling agency. That has not been recommended in the brief, but we have recommended that a council be set up representing the Dominion and Provincial governments and the Industry and the Miners, to recommend what might be done in order to make it possible for Canadian coal to serve Canadians, and if they, or your Commission, finds that any action such as that should be taken, we feel that it should be taken in order to help meet the conditions, but we didn't feel that we had made a sufficient study of it to make a definite recommendation.

Q. But you are specific in this research matter, so I was wondering if you would be equally specific so far as marketing is concerned?

A. No. Because we feel that no individual company could carry on research, as we think it should be carried on, and pay the cost, whereas if a group got together they could do this work that would be essential.



Q. You are suggesting that the best way to do it would be by cooperation, and there are some pretty large operators in this province. You recommend that this be done in the matter of research, would you also agree on that so far as marketing is concerned?

A. Yes, we would agree, but are not prepared to definitely recommend it at this point. We are not objecting to it.

Q. In fact you would cooperate to bring it about? Or let me put it this way, you would encourage it?

A. We would encourage anything that would be in the best interests of the industry, and in the furthering of our markets.

MR. TANNER (continues brief).

"An ideal arrangement would be that young scientists trained in fundamental research in Dominion and Provincial laboratories should then move on to the research organizations of the industry, and the men thus further trained could erect and supervise pilot plants and large scale installations, ultimately to take their place among the leaders of the industry.

It is urged, that in recognition of the backward state of technological research in the Canadian coal industry and the amount of work to be done, the coal industry for a term of years should set aside a percentage of its income to be devoted to its own cooperative investigations.

Elsewhere in this brief is a recommendation for the formation of a representative Coal Board or Coal Council. The three liaison committees referred to above could be established by and report to the Coal Board or Council. This organization would not only safeguard against wasteful duplication of effort, but would help to insure the maximum profit to the industry of the researches undertaken."

(I think that refers to just what you are referring to there.)

MR. TANNER (continues Brief)

In conclusion it is urged that the organization for extended coal research should be undertaken at an early date and



that some of the more important researches now in progress be started as soon as possible.

SUMMARY

Great benefits could accrue if coal operators, consumers and industrial organizations and manufacturers were to take an active part in supporting research pertaining to coal-mining and coal-burning equipment.

Three research liaison committees, at least, should be formed to initiate and advise on research; one for mining and geological problems, one for scientific and technical problems and the third for economic and marketing problems. These committees could be established by and report to a central coal body the institution of which is considered elsewhere in this brief.

The three research committees could allocate specific researches to various research organizations throughout the Dominion as advisable according to the character of the problem to be solved."

BY MR. TANNER - Now we come to Provincial Aids to the Coal Industry, and the question was asked yesterday as to whether the Province had done or was prepared to do anything to aid the industry.

MR. TANNER (continues Brief)

"Provincial Aids to the Coal Industry

The Province of Alberta approaches the Royal Commission on Coal with a number of suggestions, recommendations and pleas. The claims of the Province will surely be strengthened if it is made clear that in the past the Province has not been backward in helping the industry, and that the present requests are principally for actions that could only be taken, or that could far better be taken, by the Dominion or by all the Provinces and the Dominion."

BY COMMISSIONER MORRISON - At that point Mr. Tanner there is a question that has been asked of all the Ministers in the various coal producing provinces, and I am sure that you will supply us with the same information that we asked of them.





Some statistics showing the amount of money collected by your Government, or your predecessors in office, for say the last 15 years, in royalties, taxes or rentals from the coal industry. That is in one column. And in another column, statements showing the amounts expended by the Provincial Government on the industry.

A. We have pretty well prepared that information in a supplement to the Alberta brief, at the suggestion of Counsel for the Commission.

Q. That tells the story?

A. Yes. I think it covers the questions you have asked.

BY THE CHAIRMAN - Does it indicate what taxes are against the individual tons of coal?

A. Yes. The Province of Alberta has no tax on the production of coal.

Q. But they have royalties and ground rent?

A. Yes.

BY COMMISSIONER MORRISON - This does not contain the information Mr. Tanner. It shows the revenue, but you are telling us now of the Aid to the Coal Industry, that is the title of your chapter. The Commission is interested in knowing in addition to the revenue received from coal, how much of that is spent on the industry in each year, and how spent.

A. That would include the money put in the Research Council, administration, roads, safety, etc.?

Q. You can put it in any way you like, only don't charge the cost of the Ministerial end to coal.

A. We will be glad to get that for you.

Q. This supplement is one side of the picture, but not the whole story.

A. The information you would like is the money we expend through the Universities, Research Council, safety, and so on?

Q. Yes, and grants.

A. We will be glad to get that further information for you.

Q. I think perhaps it will show a profit.



MR. TANNER (continues brief)

"The following brief account, far from complete, of work done in Alberta, by Alberta, for the coal industry of Alberta, justifies a claim for the province of preeminence in self help for its coal industry.

The items that follow are grouped under miscellaneous governmental activities, the work of the Provincial Mines Branch, and the work of the Research Council of Alberta. The latter body has, throughout its 25 years, regarded work on coal as one of its principal duties.

Miscellaneous Governmental Activities.

The Provincial Government has required, and received, since 1904 Annual Reports of the Mines Branch. These have maintained a high standard of excellency, and form a good running history of coal mining in the province.

The Workmen's Compensation Act, passed in April 1918, has done much to alleviate the consequences of sickness and accidents amongst coal miners, and therefore to increase the amenities of life in an industry which requires special attention in this direction.

In 1919, a Provincial Coal Mining Industry Commission was set up under the Chairmanship of Mr. John T. Stirling, Chief Inspector of Mines. They completed their investigation and submitted a report with twelve recommendations in December of the same year.

In 1925 an Alberta Coal Commission was appointed with Mr. H.M.E. Evans as Chairman. This Commission submitted a voluminous report of almost 400 pages the following year, with some sixteen recommendations.

In 1928 the Alberta Coal Standards Board was appointed, with Mr. R. J. Dinning as Chairman, to consider the shipment of coal to Ontario. After thorough study of the question certain coals were recommended as suitable for shipment; but the Board could go no further.

In 1935 a Royal Commission Respecting the Coal Industry





of the Province of Alberta was appointed, with the Rt. Hon. Sir Montague Barlow as Commissioner. His report of one hundred pages the following year contained fifteen recommendations.

It is safe to say that if the recommendations of the above Commissions had been implemented, the coal industry of the Province would be in a much better condition today. It is pertinent to remark that legislation normally follows public opinion; and that the recommendations of a Commission are likely to prove futile unless by education and by forceful presentation they so carry public opinion that implementing legislation is bound to follow."

BY THE CHAIRMAN - Did any of these investigations cover what it is suggested we should do: - "Investigation in this field should include the storage qualities of various coals, method for safe stock-piling of coal and fundamental studies of the mechanism of oxidation of coal". That is on page N-2. Did any of those Commissions which are here, go into that question?

A. I don't remember. I could not answer that.

Q. You have no recollection?

A. I don't remember that at all.

Q. I would think that Board presided over by Mr. R. J. Dinning would cover that field to some extent?

A. Yes, just off-hand it would seem that that would follow the getting of the markets. He was suggesting what might be done here, whether stock-piling would be of any value until such time as the markets were available.

MR. TANNER (continues brief)

In 1920 the Province established a coal sales publicity office, with combustion demonstrations, in Winnipeg. This was continued till the depression, when it was decided that it had outlived its usefulness. Some 20 combustion leaflets, under the general title of "Coal Truths" were published. Later a Trade Commissioner and Asst. Trade Commissioner were established in Ottawa and Toronto respectively; and promotion of coal sales forms a notable part of their duties.



The Service of the Provincial Mines Branch in the Operation of the Mines Act and Regulations.

During the years coal mining has been carried on in Alberta, the Mines Act and Regulations have kept well in step with the safety requirements, and today it can be looked upon as an outstanding contribution to mine safety.

Inspection Districts have been created and the mines in these Districts are under the jurisdiction of District Inspectors of Mines with headquarters at Edmonton, Edson, Calgary, Drumheller, Lethbridge and Blairmore. There is also an Electrical Inspector of Mines with headquarters at Edmonton, who covers all electrified mines in the Province.

All Inspectors are technically qualified, and must be holders of at least first class, mine Managers' certificates, with the exception of the Electrical Inspector who is otherwise qualified. Together with the technical qualifications, these officials must have had practical experience in the field."

BY THE CHAIRMAN - Now that the Government is recognizing that they have such good technical men, I hope they will see to it that they give proper remuneration for their services. It is the first time I have seen them acknowledge it in a brief.

MR. TANNER (continues brief)

"The District Inspectors carry on the work of inspecting the mines in their respective areas, continually, in the interests of safety and efficiency, and report the results of each inspection to the office of the Chief Inspector of Mines, where such reports are analysed in the light of safety practice and procedure, and are dealt with accordingly.

The inspections deal with the following matters:

Shafts; slopes and tunnels; underground roadways; mine outlets; methods of work; ventilation; gases; inflammable dusts; electricity in all its forms; steam and compressed air equipment; hoisting and haulage apparatus; coal-cutting and loading machinery; care and use of explosive; shot-firing; roof and side control of working places and roadways; timbering and mine supports



generally; health conditions and such matters, as they affect underground workmen; duties assigned to certified officials and workmen; and inspection of surface equipment and related matters.

In addition to the above, the Inspectors act as presiding examiners at examinations held under the Mines Act; inquire into the cause of all fatal and serious accidents; attend inquests and court cases; and other matters incidental to their duties.

The Mines Act also deals with matters regarding the age at which persons may be employed in and around mines, and the fitness of such persons, by medical certificates.

There is also an Act wherein provision is made for the payment of wages to workers in the mining industry and certain other industries. This Act is known as "The Industrial Wages Security Act". These are all functions of the Government.

The industry itself has done a great deal in the matter of mechanization. As the larger producing mines in the Province move further and further in from the portal, costs of haulage and related matters increase, and this has necessitated the installation of more and more electrical and compressed air equipment, with a view to keeping costs within reasonable bounds.

In the bituminous fields, on account of the thickness of the seams, heavy pitch, gas and dust conditions, very little new electrical equipment has been introduced into the mines, although in the matter of surface cleaning plants, drying and briquetting installations, a great deal has been installed.

In the case of the larger mines operating in the domestic area however, a great deal of new electro-mechanical equipment has been introduced, such as coal-cutting, loading, haulage, fan and pump machinery.

In view of the increased use of electrical machinery in and around these domestic mines, the Government appointed an Electrical Inspector of Mines, whose duty it is to inspect and report as to the condition of all new installations, and as to the maintenance of existing plants.





This phase of government service is of great importance to the industry, both as to safety and efficiency of installation, and the workmen concerned with these operations.

The trend towards electro-mechanization is clearly shown over the past few years, if we consider purchased electrical power from 1938 to December 31st, 1944, has increased by 14,737,464 K.W.H.

In 1939 legislation was enacted making it compulsory for mine electricians to be the holders of mine electricians' certificates (granted after examination under The Mines Act) before they can take charge of electrical installations in and around mines. The certificates of such men has already proved of great value, inasmuch as a higher standard of work is being done both in maintenance of existing equipment, and in the installation of new equipment, thereby decreasing the hazards arising from the use of electricity.

At the present time there is a shortage of trained electrical technicians in the Province, and this field offers an exceptionally bright future for young men who will apply themselves and gain the necessary technical and practical training required for this type of work.

#### Activities of the Research Council of Alberta

##### Geological Investigations.

Two specific reports on coal fields have been published and a third is in preparation; but in addition many other separate and annual reports and maps give geological information on coal areas and seams.

##### Survey of the Coals mined in the Province.

Jointly by the Mines Branch and the Research Council of Alberta. Many thousands of samples have been taken, from some 450 coal mines in the Province, by the Mines Inspectors, and these have been analysed and subjected to many special tests by the Research Council of Alberta. The results form the basis of Report 35, Coals of Alberta, published by the Council in 1944.



Special items which might be mentioned are: methods of analysis and evaluation, moisture and mineral matter, micro-spores, ignition temperature and solubility of coal and the fusibility of coal ash. Also studies of combustion characters of coal.

#### Coal Preparation and Allied Investigations.

This work includes studies of coal sizing and distribution of ash through the sizes, screen equivalents, washability tests, briquetting tests, and determinations of friability, storability, oxidizability, etc.

#### Coal Classification

The Research Council staff took a prominent part in the work leading up to the preparation of the American Society for Testing Materials classification of coal, and to its adoption in Canada.

#### Gas Processing and Utilization Investigations

These include combustion tests in industrial and domestic furnaces, and in automatic domestic stokers, carbonization tests, hydrogenation of coal, and smithy tests with coal.

#### AN ORGANIZATION PLAN FOR THE CANADIAN COAL INDUSTRY

Mr. Robert Foot, Chairman of the Mining Association of Great Britain, in January 1945, after a careful study of the coal industry in Great Britain, issued a report to the coal owners suggesting certain undertakings to reorganize the industry. This report is an excellent discussion of the problems of the industry and suggests moves in the direction of their solution. As the problem is much the same in Canada, the report is commended to the study of your Commission and, meanwhile, the following digest is presented for your consideration.

The Problem: The problem is stated as that of giving to the miner continuous employment at a good rate of wages and to capital a return allowing a proper margin for amortisation, depreciation, development and reasonable profit; while at the same time supplying the needs of consumers at economic prices.





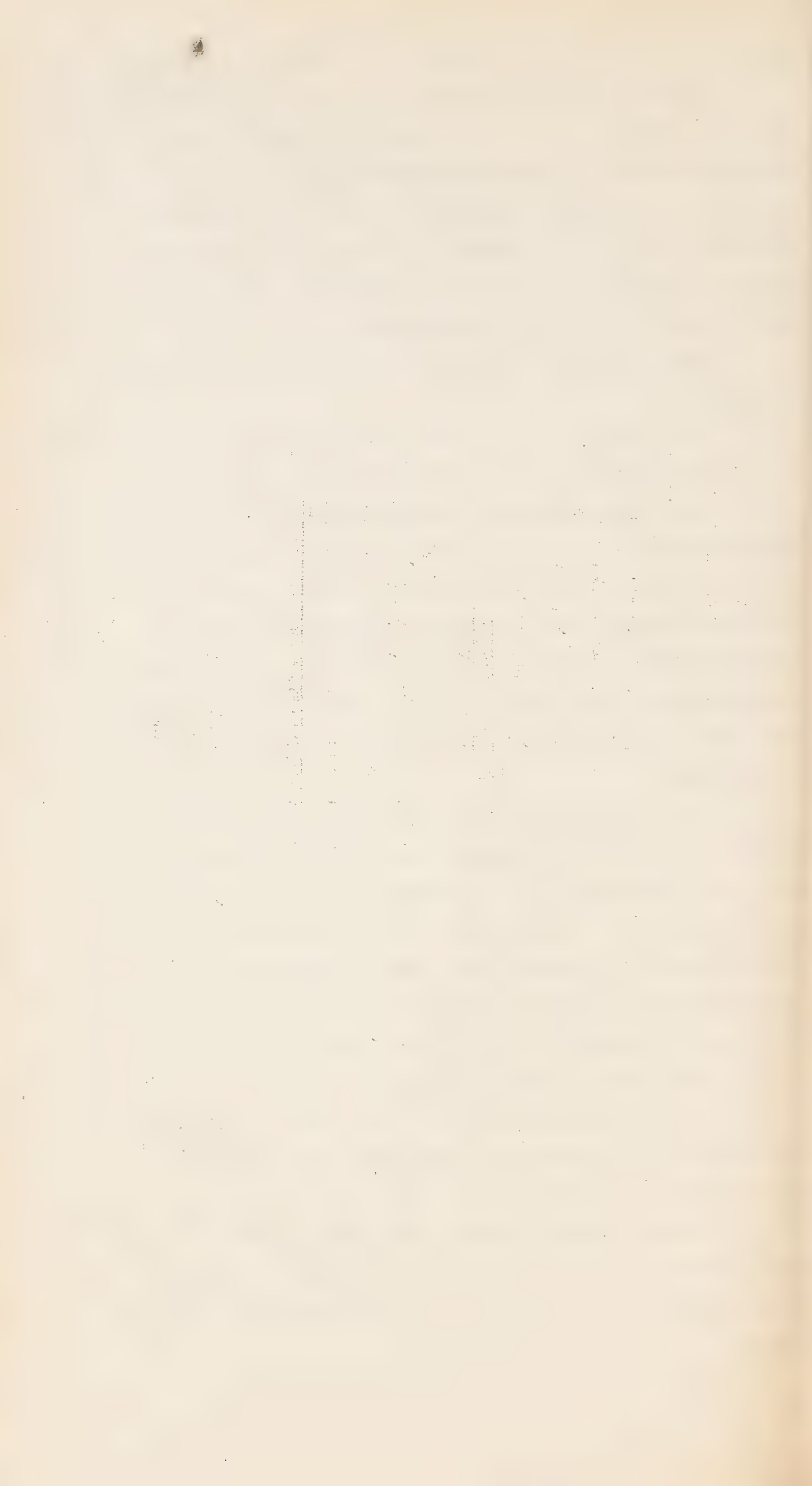
To accomplish this there is required: from the miner, good and continuous work with a liberal approach to cost-reducing processes; from the management, enterprise, efficiency, and adaptability to all modern methods; and from the consumer, an understanding of the industry's problems, and sufficient patience to give the miner and the owner their chance to make their respective but mutual contributions.

The objective of Mr. Foot's plan may be summarized as follows:-

(1) There can be no other broad basis for the organization and policy of the coal industry than that of national service (and this fundamental principle underlies all the subsequent proposals). But for an industry so to regard its responsibilities and to arrange its affairs, is not a negation of private enterprise, nor an admission that private citizens agreeing together of their own free will, will not discharge their responsibilities more effectively and with greater enterprise and efficiency, and with more certainty than any state-imposed organization.

(2) Colliery owners, big and small, should for all purposes accept a joint responsibility for the efficient management of the industry in the interests of the nation; and can only discharge that responsibility if, as far as main principles and policies are concerned, they take a national and not a local or sectional view, and are prepared to accept and faithfully to carry out all decisions that may be designed to that end.

(3) The colliery owners must accept their responsibilities in a sense of trusteeship for the nation, and must not only establish the main principles under which this trusteeship is to be carried out, but must also so organize the industry as to carry for all time an inherent promise - and indeed guarantee - that these principles will be held fast, and faithfully put into practice wherever coal is mined in this country now or in the future.



Many excellent suggestions in Mr. Foot's report could be applied to the coal industry in Canada. Among these are:-

(a) That the workers in the industry should be ensured of a wage and a stability, continuity of employment, and general conditions as will give them a good standard of living throughout their working life; and that, as a principle, the earnings of those underground should be maintained at a level in each district that will give them their pride of place amongst industrial workers.

(b) That there should be a reasonable return on the capital employed in the industry, after allowing at all times of a proper appropriation to be made for amortisation, for depreciation of plant, and for development.

(c) That the workers in the industry be kept fully informed of its progress and conditions and be given every opportunity and encouragement to make their full contribution towards its greater prosperity.

(d) That the best modern principles of labour administration and management be applied throughout the industry.

(e) That the best practice be applied by every colliery undertaking with regard to the safety of all its underground and surface arrangements, with the purpose of moving always in the direction of greater safety of the mine itself and of education and training of the workers in safety-first precautions, with close arrangements in every colliery between management and workmen to insure that this important matter is kept, by joint discussion and co-operation, continually under review.

(f) That every support, encouragement and financial backing be given to research conducted by the industry itself or by outside bodies.

(g) That proper arrangements everywhere for the recruitment of new entrants to the industry and for their subsequent education and training, and for the further training and education of those already employed in it, be established throughout the industry and maintained permanently.



(h) That there should be built in collaboration with the distributors, a technical organization designed to give the best technical advice to consumers to enable them to purchase the most suitable kinds of coal and to use it in the most efficient and economical way.

(i) That the coal of the country should be mined in accordance with the best mining practices with due regard to (1) adequate supplies at a proper price; (2) the conservation of our coal resources, (3) safety. "

BY THE CHAIRMAN - I see he does not make any suggestions as to how the coal miner is going to live after his working days are over.

BY MR. FRAWLEY - There is no superannuation.

BY THE CHAIRMAN - He just says they are to give them a good standard of living throughout their working life. Not much security, or suggestion of security, after their working days are over.

BY COMMISSIONER MORRISON - If they make the wages high enough.

BY MR. TURNER - No, he has not made any recommendation in here.

BY THE CHAIRMAN There has been a good deal of criticism of his report even among the miners and operators, I understand.

BY COMMISSIONER MORRISON - If he set up a reserve, and gave them enough at the time, perhaps on a royalty basis.

BY MR. FRAWLEY - A royalty has been suggested.

BY COMMISSIONER MORRISON - And one day will be a fact. Some coal miners may even get to be oil operators.

BY MR. FRAWLEY - And it will probably turn out to be an indirect tax and they can't impose it anyway.





BY MR. TANNER - We have been trying to take out of Foote's report the part we think should be applied.

BY THE CHAIRMAN - I have found among miners a great deal of uneasiness about the time when they will not be able to work. No security. Perhaps it is their own fault. Perhaps it is more the fault of the Department.

BY MR. FRAWLEY - I thought it was rather a shocking thing, except when one thinks there is very little of that sort of thing in most industry.

BY THE COMMISSIONER - I am only saying that in the minds of the miners there is discontent, being fearful of the future.

BY MR. TANNER - If I were to comment on that I would say certainly arrangements should be made whereby those engaged in industry and elsewhere should have that security.

BY COMMISSIONER McLaurin - The only place I know of security in the Province of Alberta is in the bird sanctuary. They have security for the ducks and geese.

BY COMMISSIONER Morrison - And on the Bench.

MR. TANNER (continues brief)

"We are in agreement with the spirit of Mr. Foot's suggestions and urge that, where applicable, they might be adapted to the situation in Canada.

Over and above the problems of the coal mining industry as such and as dealt with by Mr. Foot in describing the industry in Great Britain, and in similar surveys, we have in Canada, an over-shadowing and permanent problem.

The problem arises out of the geographic location of our great coal deposits in relation to major markets in Canada, and the fact that Canada has not, as yet, developed a national coal policy whereby these great natural resources may effectively be developed to support and strengthen the economic position of Canada and the general welfare of our people, and steadily used to provide work for Canadian citizens.

Elsewhere in this brief we have described the freight rate position and disadvantages experienced by Alberta coal in respect to markets. British Columbia and Nova Scotia coals are



in a like position. We have also endeavored to show the present comparative economic importance of coal in the Provincial and Dominion field.

No attempt has been made to summarize statistically the benefits which would flow from an intergrated Canadian policy of completely supplying the Canadian market with Canadian coal. Your Commission has been shown, however, the large extent of the market now being supplied with American coal at a present cost in round figures of about \$80,000,000 per year. Contrasted with this, we have partially idle mines and miners and unlimited coal resources of approved quality sufficient to serve all of Canada's fuel and heating needs as far as economically feasible for centuries to come."

BY MR FRAWLEY - The first part of that sentence: - "No attempt has been made to summarize statistically the benefits which would flow from an intergrated Canadian policy of completely supplying the Canadian market with Canadian coal". That seems to carry an implication that that would be of benefit, to completely supply the Canadian market with Canadian coal and shut out the American coal. Is that the thought?

A. In making that statement, they realize that it would take a very careful study in order to determine what advantage there would be if we were prepared to admit that.

Q. You are not saying that such an exploration would discover benefits?

BY THE CHAIRMAN - Don't you think it would be well for the wealth of Canada if we could supply all our necessity? If we could supply all our necessity of coal, would not that put up our economic status?

A. That is the question.

Q. Wealth does flow from production; the more production we get, the wealthier we are. I am not talking economics because I don't know anything about them, but am just suggesting that that is so. We pick up one of Mr. Illsley's pamphlets and he says that wealth is measured by so much production.





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Hon. N. E. Tanner

A. That is right up to a point, but what I have in mind is that there is benefit to be derived from international trade, and if we shut out that American coal completely, it is doubtful..

Q. But I don't know that there will be much wealth to Canada if we have to pay out \$2.50 for every ton of coal that goes out from our coal producing provinces.

BY COMMISSIONER McLAURIN - If you shut it out, they might then buy some of our beef.

MR. TANNER (continues brief)

"It is strongly recommended that a national coal policy be adopted having for its primary objective the promotion and establishment of the use of Canadian coal to fill effectively Canada's coal needs; and further that, to effectuate such national coal policy and to develop and extend the same as future circumstances may require, there be established a National Fuel Board to be composed of representatives of the Dominion and Provincial Governments, the mining industry and the miners.

And further, that the National Fuel Board so constituted, be invested with appropriate powers to accomplish effectively the purpose of the national fuel policy.

#### SUMMARY OF RECOMMENDATIONS

It is strongly recommended:

1. That a national coal policy be adopted having for its primary objective the promotion and extension of the use of Canadian coal as far as economically feasible.

2. That, to effectuate such national coal policy and develop and extend the same as future circumstances may require, a continuously functioning National Fuel Board be established and composed of representatives of the Dominion and the Provincial Governments, the mining industry and the miners. The major function of such Board should be to advise the Dominion Government on matters pertaining to subventions, freight rates, fiscal policies, etc, and also to co-ordinate the relationships of all phases of the coal industry in Canada and to facilitate their harmonious operation without assuming administration control or interfering in any way with the autonomy of the provinces or their



administration of matters pertaining to the coal industry within their respective jurisdictions."

BY THE CHAIRMAN - Then the people who have to pay \$2.50 on twenty million tons put into Ontario, that is going to reduce a little the wealth of the country.

A. We might produce other things.

BY COMMISSIONER MORRISON - Would you elaborate on what you mean by "as far as economically feasible".

A. Yes. I would say we might produce all the coal Canada wants, we might set up a self-producing country. On the other hand, we might find it more economical to produce things that we can produce more readily and at less cost, and trade those things for things that other countries can produce more economically than we can.

BY COMMISSIONER McLAURIN - What you mean, we will get as many \$2.50's out of Quebec and Ontario -

A. As we in Canada can afford to pay and keep our industry economically mining.

Q. I think we can say until they squeel.

BY MR. FRAWLEY - You start shutting out that Pennsylvania coal and there will be some squeeling a little further South.

BY THE CHAIRMAN - We are not concerned with their squeeling.

BY MR. FRAWLEY - We were concerned in 1937.

BY COMMISSIONER MORRISON - Where are we going to get the dollars to buy back the products that are manufactured in Ontario and Quebec if we don't sell some coal.

BY COMMISSIONER McLAURIN - We have been living for 25 years under unfavorable trade relations with the United States and anything we can do to cut down the demand for American goods -

BY COMMISSIONER MORRISON - We still have to buy the products of the manufacturers that sit behind the brick walls of Ontario and Quebec, and where are we going to get the money.

BY MR. DICK - Three years prior to the war we were purchasing a million tons from Germany for Ontario and Quebec. So it is not all American coal we are talking of replacing.





BY COMMISSIONER MORRISON - I am only suggesting that Mr. Tanner expound his views on where we will get the money from, but it is a serious question.

BY MR. TANNER - Yes, I think that is a serious question.

BY COMMISSIONER McLAURIN - We have enough amateur converts gathered here today to make up that Board.

BY MR. FRAWLEY - I would be what Commissioner Morrison would call a International Board Member.

MR. TANNER (continues brief)

"Coal Reserves

3. That a revision of the estimated coal reserves in each of the coal producing provinces in Canada be made by the Dominion Government and based on the present knowledge of the coal deposits which is much more detailed than in 1912.

4. That more extended surveys be carried out in Alberta by the Mines and Geology Branch of the Department of Mines and Resources and that the results of all surveys be made available to the interested governments and to the industry.

Coal Marketing

5. That an effective incentive be presented to the two great railway systems, themselves national in scope, to use Canadian coal more extensively in their own operations."

BY COMMISSIONER MORRISON - What do you mean by "an effective incentive be presented"?

A. There may be different things implied there.

Q. It is your brief Mr. Tanner. I want to know what you mean.

A. As far as I am concerned I would make these incentives such, if it were possible, to get the information which I think it is possible for your commission to get, that they would use our coal as far as possible, as far as economically feasible, and transport our coal at a price set up by this Board, or those who are responsible for doing it.

Q. They claim they are doing the first part now; Mr. Welby convinced the Provincial Government of that, as I see by the amendment they are making to your brief.





BY MR. FRAWLEY - We are thinking of some sub-amendments.

BY MR. TANNER - I would say that the railways have, during all the hearings that I have a record of, maintained that they are doing the second, transporting coal as cheaply as they can.

BY COMMISSIONER MORRISON - "I hae ma doots" about that last, but the first one, they told us that they are doing just that now, that they are taking coal as far as economically feasible.

BY THE CHAIRMAN - And get the rest from Ohio.

BY MR. FRAWLEY - They are carrying some on subventions, so that is beyond what is economically feasible.

BY COMMISSIONER MORRISON - You might get an argument on that but not here. We will wait until we get behind closed doors to argue that.

BY MR. TANNER - I think that is about all I can say on that.

BY COMMISSIONER MORRISON - The word "incentive" intrigued me.

BY MR. TANNER - If we had the information you are asking, we would not ask the Board to get it. We feel we have not sufficient information, and we feel that no others have it but the railways, and we hope that the Commission can find out those conditions and that a Board, if set up, will be given authority to get the information and make the recommendation.

BY COMMISSIONER MORRISON - In short Mr. Tanner, the Province of Alberta expects railways, as national institutions, to do more than they have ever done before.

A. Far more.

BY COMMISSIONER MORRISON - And I agree entirely; and I say never cut the price of coal to the operator again.

BY THE CHAIRMAN - It would be a great incentive if the mining operators in this country could show the railways that their tonnage would be increased by a million tons a year. Would that not be a great incentive? They say the larger the business the cheaper the distribution, freight rates.

A. That with extended markets, if they had the larger tonnage to haul, so far as I understand their set-up -

BY THE CHAIRMAN - Nobody understands that except themselves.

BY COMMISSIONER McLAURIN - It was suggested yesterday that



we as a Commission explore the subject, and if we get lost, then have another Commission sent out to find us.

A. I know in reference to the oil at Turner Valley, when the suggestion was made of a pipe line they got greatly reduced rates. That is something that I cannot understand but it might be explainable. At least the railways decided to haul it at that rate.

BY THE CHAIRMAN - They chose to.

BY COMMISSIONER MORRISON - It was economically feasible.

BY MR. TANNER - That would be my conclusion.

MR. TANNER (continues brief)

"6. That the federal government institute a continuing campaign of newspaper, periodical, radio and motion picture publicity and other forms of educational effort to stimulate a Canadian demand for Canadian coal.

7. That the Federal Government be urged to negotiate an American-Canadian reciprocal arrangement whereby Canadian western coal might freely move to western United States as against similar importations of American coal to mid-Canadian points.

#### Freight Rates

8. That the Dominion Government take immediate and effective action to establish by statute substantially reduced freight rates for coal with provisions for flexibility to meet emergent or changing conditions.

9. That this Royal Commission make a complete and thorough investigation with the Board of Transport Commissioners and the railways of the present high basic \$8.-per-ton freight rate on coal shipments from Alberta to Ontario.

10. That a complete examination of freight handling costs be conducted in respect to present day conditions to determine the possibility of rates more favorable to coal through the use of modern equipment and solid trains.





Subventions

11. That the federal government establish subventions on a long term basis subject to review every ten years and governed by zones according to mileage rather than by provincial boundaries.

12. That, in view of the fact that the agricultural and mining industries in Alberta are paying large subsidies in the form of tariffs to industries in Ontario and Quebec, it should be regarded as just and right that the federal government assist the coal industry of Alberta.

Standardization

13. That specific grades be established for coal by joint action of the Dominion and Provincial governments.

14. That standardization of quality be controlled by provincial authority under powers established by the Dominion or by joint action of the Dominion and the Province as found legally necessary.

15. That standardization of size be uniform throughout Canada but that control be enforced by the provincial authority.

16. That experiments be made to establish equivalents for different kinds of screens and types of coal fractures.

17. That storage plants be erected at large distribution centres and used to facilitate also the standardization of both quality and size."

BY MR. TANNER - On that No. 14, there is something that we have not recommended but I think we should, and that is that the Province has not authority to do some of the things that we think should be done with regard to grading of coal and restricting shipments of coal, and that sort of thing.

MR. TANNER (continues brief)

"Utilization of Coal

18. That custom briquetting and coal washing plants be established at suitable places to serve a number of individual collieries.

19. That the Dominion Government be urged to institute large scale experiments covering the following points:-



- (a) cheap production of water gas from Alberta coal.
- (b) manufacturing hydrogen with a view to developing a comparatively cheap hydrogenation processes.
- (c) blending different Alberta coals to produce better coke in carbonization plants.
- (d) solvent extraction of Alberta coals, particularly in coals of group IV and V.

Research

20. That the Bureau of Mines conduct continuous research into all phases of coal mining in Canada with special attention to improved methods of production and increased use of coal.

21. That a branch of the Bureau of Mines be established in Alberta to work in cooperation with the Research Council of Alberta.

22. That research liaison committees be formed to initiate and advise on researches: one committee for mining and geological problems; one for scientific and technical problems; and one for economic and marketing problems; these committees to be formed by and report to the National Fuel Board mentioned previously.

Findings of Commission

23. Few effective beneficial results can accrue from the labour of this Commission and those who have contributed briefs unless the widest possible publicity is given to the findings of your Commission. We therefore recommend that the Dominion Government be urged to retain a competent public speaker for six months after the publication of the Commission's report to address service clubs and industrial, labour and technical organizations across Canada and that full publicity be given to the findings of the Commission through the press and radio.

Conclusion

The spirit of the intentions of the Government of Alberta has been to bear constantly in mind the ultimate object that when the time comes for the vast coal reserves to yield more fully their blessings to mankind, human ingenuity will have devised ways and means of production which will eliminate completely the burdens of human toil and the dangers to life and limb which are now the lot of those who labour in the pit.

(Page 2454 follows)



BY MR. FRAWLEY: Mr. Dick, the question arose yesterday as to why in 1923 when there was no subvention, the subvention having been removed because the coal was needed in Western Canada ---

BY THE CHAIRMAN: What year?

BY MR. FRAWLEY: 1943. That that was a better year than in previous years when you had the full benefit of all of the subventions that were in force. Oh, by the way, we should swear our witness.

HON. N. E. TANNER: Do you want me to read this or just present it as a supplement?

BY MR. FRAWLEY: Oh no, I want that read. This is a special memorandum dealing with rentals and royalties. Perhaps we had better get in all those before I ask any questions.

BY COMMISSIONER McLAURIN: There is no need of that being read.

BY MR. FRAWLEY: I think it just didn't occur to the people preparing the provincial brief or it would have been in, and I thought of it and asked them to ---

BY COMMISSIONER McLAURIN: Put it in without reading it.

BY COMMISSIONER MORRISON: Put it on the record.

Exhibit 137 - Supplementary Information  
submitted by the Province of  
Alberta

ALBERTA COAL

Leases, Royalties and Taxation

Lands patented, sold or disposed of for valuable consideration by the Dominion Government prior to October 31, 1887, conveyed the surface and all minerals excepting gold and silver.

As early as the year 1883, coal rights were sold outright at prices ranging from \$7.00 to \$10.00 an acre on coal other than anthracite, and for \$20.00 an acre on anthracite, and it was not until February 6th, 1901, that regulations were introduced reserving royalty to the Crown, which became effective on April 6th, 1901.





The practice of selling coal rights continued until May 4th, 1907, but all sales following April 6th, 1901, were subject to royalty which on May 31st, 1901, was established at the rate of 10 cents a ton and later reduced to 7 cents a ton on merchantable coal mined following January 1st, 1915.

The sale of coal rights was discontinued on March 4th, 1907, and from then to the transfer of the natural resources of the Province on October 1st, 1930, coal rights were disposed of by lease at a yearly rental of \$1.00 an acre and royalty of 5 cents a ton.

Under the administration of the Province there is no provision for selling coal rights, and disposal is made by lease for a yearly rental of \$1.00 an acre and a royalty at such rate as may from time to time be prescribed by the Lieutenant Governor in Council, and at present the royalty payable is 5 cents a ton.

During the administration of the natural resources by the Dominion Government, approximately sixteen million acres of coal rights were patented and nearly 99% of such disposal was not subject to the payment of royalty to the Crown, as shown in Table 1.



TABLE 1

VARIOUS GRANTS CONVEYING COAL RIGHTS  
IN ALBERTA BY DOMINION GOVERNMENT

<u>NATURE OF GRANT</u>	<u>ACREAGE</u>	
	<u>No Royalty</u>	<u>Subject to Royalty</u>
Subsidies to Railways	13,031,731.00	
Subsidy to Hudson's Bay Co.	2,404,000.00	
Coal Lands Sales, Mining Lands Sales and Mineral Sales	46,724.44	189,201.99
Unpatented Mineral Sales		370.40
Patented after Sept. 1, 1905		
Homesteads	3,007.46	
Special Grants	21,165.73	
Right of Way and Station Grounds	44.79	
Pre-emptions	2,190.52	
Small Lands Sales of Various Kinds	5,817.08	
Military Homesteads, Military Bounty Grants and North West Mounted Police Grants	647.00	
School Lands Sales	151.01	
Homesteads, etc., patented before September 1, 1905, approximately	250,000.00	
	15,765,479.03	189,572.39
TOTAL - 15,955,051.42 acres		

Consequently there is considerable coal mined in the Province that is not subject to Crown royalty (Table 2). It might be remarked that leases of freehold coal require the operator to pay royalty at varying rates, ranging up to 50 cents a ton.





TABLE 2

Production of Coal for the Year 1943  
Showing the Tonnage and Percentage  
Subject to Crown Royalty

<u>Fields</u>	<u>Tons Mined</u>	<u>No Royalty</u>	<u>Subject to Royalty</u>	<u>Percentage Subject to Royalty</u>
Bituminous	3,469,993	1,005,427	2,464,566	71.0%
Sub-Bituminous	791,952	12,253	779,699	98.5%
Domestic	3,416,037	1,743,998	1,672,039	48.9%
Totals	7,677,982	2,761,678	4,916,304	

Revenue from coal is derived from rentals and royalties on coal leases and from royalty on freehold rights granted subject to Crown royalty.

TABLE 3

Statement of Rentals and Royalties Collected by  
Provincial Government on Coal Mined on Crown Leases  
and Freehold Rights Subject to Royalty From October  
1, 1930 to March 31, 1944.

<u>Fiscal Year</u>	<u>Rentals</u>	<u>Royalties</u>	<u>Total</u>
1930-31 ( $\frac{1}{2}$ year)	\$ 71,329.17	\$ 110,140.80	\$181,469.97
1931-32	138,203.32	151,524.42	289,727.74
1932-33	131,861.06	148,771.79	280,632.85
1933-34	126,440.91	203,047.95	329,488.86
1934-35	133,793.73	188,487.82	322,281.55
1935-36	123,139.96	206,470.99	329,610.95
1936-37	121,352.61	193,810.33	315,162.94
1937-38	119,808.71	173,386.26	293,194.97
1938-39	111,431.25	152,341.01	263,772.26
1939-40	116,187.52	176,615.53	292,803.05
1940-41	89,637.77	215,886.92	305,524.69
1941-42	84,830.31	239,627.78	324,458.09
1942-43	84,030.37	260,313.62	344,343.99
1943-44	93,360.86	259,323.95	352,684.81
Total	\$1,545,407.55	\$2,679,749.17	\$4,225,156.72



Privately owned coal rights and leases from the Crown were, to the close of 1944, subject to taxation by the Department of Municipal Affairs or municipal districts, as the case may be, but it is not possible to procure the tax collection figures.

The Mineral Taxation Act did not apply to coal until its re-enactment at the 1945 session of the legislature, and the rate of acreage tax for the current year is one cent an acre on freehold minerals but the mill rate upon the assessed value of minerals in producing areas has not been set for the year.



BY MR. FRAWLEY: Now then, the other submission that Mr. Tanner has is the submission of the Alberta Coal Committee.

HON. MR. TANNER: That was submitted to the Dominion Government in 1944, just a year ago today.

BY MR. FRAWLEY: It was filed with us as part of our material.

Exhibit 138 - Submission of Alberta  
Coal Committee to the  
Federal Government

Mr. Tanner is formally tendering it to us on the proposition that it is as timely now as when it was presented.

HON. MR. TANNER: I should also like to put with that the Minutes of the discussion that took place between members of our Committee and members of the Coal Control.

BY MR. FRAWLEY: How were these minutes prepared? Were they taken down by one of Mr. Brunning's secretaries?

A They were prepared by one of his secretaries and sent out to the Committee here. They were scrutinized by the Committee and Mr. Stubbs, who was acting as our secretary at that time, made certain amendments to them, sent these amendments back to the secretary. These amendments were approved by Mr. Brunning and are now included in the minutes.

Exhibit 139 - Minutes of Discussion between  
representatives of the Alberta  
Coal Committee and the Coal  
Controller, in the office of  
the Coal Controller, Ottawa,  
April 18, 1944.

BY MR. FRAWLEY: Then we won't read any of those. We have had sent to us two reports of the Research Council--Report No. 34, we now as a matter of fact have the whole of Report 34 but some time ago we were given Dr. Lang's excerpt, and we have also had Report 35 of Mr. Stansfield and Mr. Lang on Utilization.

BY COMMISSIONER McLEURIN: I have read them through; probably all of us have. I don't think it is necessary to put them on the record.

BY MR. FRAWLEY: Now, Mr. Dick, the question I asked you





A Well, the output in 1941 was 6,481,000. In 1943 production was 7 million, and you want to know why there has been an increase during that period? That is your question?

Q Yes, and in the absence of subventions.

BY THE CHAIRMAN: Well now, Mr. Frawley, you are having him under examination. (To Mr. Dick): The oath that I am going to give you refers only to facts. Opinions of course you will express as reasonably as you can, when it comes to opinion. When it comes to information that you got, all we ask is that the information be based on a proper basis.

Oath administered to W. J. Dick

MR. DICK: As you know, one of the reasons for cutting out the shipments to Ontario was through the Emergency Coal Production Board, through orders from them, and the policy of that Dominion Government department was to send coal where it was needed. Now in 1943 as compared with 1941 there has been an increase of shipments into British Columbia of approximately a little over 600,000 tons. See Table No. 7. There is also a small increase into Saskatchewan of a matter of a little less than 200,000 tons, a small increase into Manitoba, but a very large increase into the United States. In other words, a lot of coal from Alberta was sent down into the United States.

BY MR. FRAWLEY: That would be mostly from the Crows Nest Pass?

A Mostly from the Crows Nest Pass. As a matter of fact that amounts to over 300,000 tons in that particular year.

Q Now to put on the record the benefits that did come from subventions, can you call attention to any increase in production following the introduction of subventions?

A Of course that is going to be very difficult in this way, that you might have been losing a lot of tonnage due to the depression. It was a depressed period when the subventions came in. Our production probably would be very



much lower. There is a relationship between the depression and production of coal, because if our grain is not moving, naturally the railroads are not using the same amount of coal, and then again if the farmer is not selling his grain he is not able to buy coal. In other words he goes more or less cold.

BY THE CHAIRMAN: Could you make some comparisons say between the year 1927 or 1928 and the year 1938?

A Well, in 1927 the production--that is Table 7--the production was 6,653,000 tons. Now that increased up to a maximum in 1928 of the largest production that we had, excepting 1942 and 1943, because they were peak years. Now it fell off to a minimum of about 4,300,000 tons in 1936.

BY COMMISSIONER MORRISON: Compare 1932 and 1936.

A 1932 was 4,532,000 and 1936 practically the same, 5,075,000.

BY THE CHAIRMAN: Have you got a tabulation indicating what your increase into the province of Ontario amounted to?

BY MR. FRAWLEY: The same page shows that. Let's look at Ontario some year prior to subventions.

BY COMMISSIONER McLAURIN: I don't think any went in there prior to subventions.

A The first shipment, the record we have here, on the same table, 1918, was 629 tons. 1923 was 52,000 tons--I am just going down--in 1926, 74,000 tons; in 1930, 55,000 tons; 1935, 64,000, and then the big years come on in 1941, 1942 and 1943.

BY THE CHAIRMAN: Was there an increase between 1933 and 1939?

A 1933 was 20,000 and 1939 was 62,000.

BY MR. FRAWLEY: It jumped, you see. In 1932 it was 20,000 and then in 1933, 39,000, 1934, 55,000, and 1935 64,000, and then it goes up of course during the war years. In 1943 it dropped down because the subvention was removed?

BY COMMISSIONER McLAURIN: The subvention wasn't removed.

BY MR. FRAWLEY: Not removed; it became a wartime matter subject to Mr. Brunning's orders and he simply diverted the





coal, and lately in 1945 he has again permitted it to go, has removed his prohibition, you might say. The whole burden of your complaint is that the subvention as it is presently administered is not particularly stable and therefore not what you want? Perhaps you have said all you need say about that. You think if it were stable, greater benefits would come from it? More coal would move into Ontario if it were put on a statutory basis to be revised every 10 years?

A That's right.

Q And you say any conclusion that may be reached that it has not done a very good job is due basically to the fact that it is not stable and it goes from order-in-council to order-in-council?

A That is true.

Q Now the other thing I want to ask you about is this question: You say on page 17-8 that grades should be established rather than a prohibition of shipment of lower grades. Now why do you say that?

A May I be permitted to ask the one who prepared the brief?

Q I think that's right. I am going to ask Mr. Stansfield some questions anyway. Dr. Stansfield, would you answer that?

BY THE CHAIRMAN: Is he going to give evidence?

BY MR. FRAWLEY: Yes sir.

DR. EDGAR STANSFIELD Sworn. Examined by Mr. Frawley.

Q Would you care to say something, Professor Stansfield, in elaboration of this proposition that what you want is better grades rather than a prohibition of shipment of lower grades, or have I properly taken in what you are suggesting?

A I would like to suggest, sir, on the question of shipping coal, that the further you have to ship the coal the more important it is to have a high grade, shall we say a high



heat value. I would put the point this way: the consumer is buying heat. The freight is fixed by weight. If you had two coals, one of 5,000 heat units per ton and one of 10,000 heat units per ton, and the freight rate was 1 cent per ton for a particular distance, then the consumer who would in one case be buying the 5,000 heat unit coal would be paying 2 cents freight; the other man would be paying 1 cent freight. Therefore I submit that the further you have to ship the coal the more important it is to have a high heat value. Then there is the further explanation that if you ship inferior qualities of coal you get dissatisfied consumers and you lose your market, and I think again the further coal is being shipped the more important it is that the quality should be maintained.

Q Now how do you specifically propose that that is going to be done, by only allowing certain coals to go out into the export market or by allowing them all to go and letting the thing sort of find its own level?

A Of course I find it a little difficult to speak for the Government. My own personal feeling would be that an inferior coal should not be allowed to be shipped.

Q Let's suppose we have one of those standardization boards operating and you are a member of it.

A Supposing we have a licensing board in Alberta I would say that that licensing board would institute a standard, would say that a coal to be shipped, shall we say to Ontario, should have not more than a certain moisture content, should have not more than a certain ash content, not less than a certain heat value, then approach the different operators, say, "Can you give me these qualifications?" If they could they would give them a licence to ship coal to that destination. For the nearer market the standards could be less stringent, the further the market the more stringent, on the basis I mentioned before. That would be my own personal view.



Q If such a board asked you to formulate a plan for them it would be one such as that?

A Yes.

BY THE CHAIRMAN: I don't know if the same thing we have down East is true here. Have you got coal seams here worked by the same operators that produce different kinds of coal?

A Not to the same extent. Our coals here mostly vary by the distance from the mountain face.

BY MR. FRAWLEY: You said a moment ago, you drew a comparison which showed that the freight actually varies, the cost of moving coal actually varies, if they were charged on a heat basis. What do you think of offering subvention assistance on some similar basis? Have you ever thought about that?

A No, I have never thought about that.

Q Now the next question is perhaps for Mr. Dick. Did I understand you correctly when you said that the wages were lower in the domestic field than in the bituminous fields?

MR. DICK: No, I can't really answer that. You see, there are what they call datal men and company men, I mean a contract miner. The contract miner is paid at a certain rate and it depends on what he produces.

Q This is what I was thinking of, at F-1, "As a rule, higher wages are paid at bituminous and sub-bituminous mines."

A It is so difficult to compare. I think that general statement is correct. Refer to Table 14 on the wage rates, and on the contract miner. In the Drumheller field, for example, from \$5 to \$11.15 per day is the contract miner as compared with, say, the Crows Nest coal area, \$7.55 to \$10.10 per day. The minimum is lower in Drumheller.

BY COMMISSIONER MORRISON: What page is that?

A That is opposite F-1, Table No. 14. Company miners, there is not a great variation only it is a little higher than the maximum on the company miner. Drivers are practi-





cally the same. Anyway it is all laid out in the table there.

BY COMMISSIONER McLAURIN: The variation between the fields is of practically no consequence compared with the difference in the number of days worked?

A That's true.

BY COMMISSIONER MORRISON: Mr. Dick, in the Drumheller coal area you have a minimum of \$5 a day. What mine were you going to there?

MR. DICK: Is the chief inspector here?

BY COMMISSIONER MORRISON: I would like to know what mine has contract miners at Drumheller at \$5 a day. I would like to know about it. I would take a day off.

MR. DICK: I could call Mr. Crawford on that.

MR. CRAWFORD: That was secured from the statistician, Mr. Brown.

BY COMMISSIONER MORRISON: Where does he live?

MR. DICK: He is in town.

BY MR. FRAWLEY: Provincial Statistician, Department of Trade and Industry.

BY COMMISSIONER MORRISON: His boss is here, the Deputy Minister; perhaps we could check up with him. As a matter of fact, Mr. Dick, you know of your own knowledge that no such rate exists as \$5 for contract miners? Why, they would starve to death.

MR. DICK: That's right.

BY MR. FRAWLEY: Getting back to the statement that they get more in these so-called sub-bituminous than in the so-called domestic fields, that is what I want the record to be clear about, and if so, what?

BY COMMISSIONER McLAURIN: What does it matter? The boys have got the opportunity to collectively bargain with their operators and we take them as they are. We are not going to solve the national fuel problem ---



BY MR. FRAWLEY: With respect, I think that if the miners in the Drumheller field are getting less, notwithstanding the fact that there<sup>is</sup> an agreement with the U.M.W., that these men should have it spread on the record.

BY THE CHAIRMAN: Would it have anything to do with production?

BY MR. FRAWLEY: I don't know. The miners are on short time in Drumheller now.

BY COMMISSIONER MORRISON: I am glad to see the counsel for the Commission convinced that the miners in Drumheller are underpaid.

BY MR. FRAWLEY: I am not interested in bringing down Mr. Stubbs' miners; bring the others up.

BY COMMISSIONER MORRISON: If you write a letter to the United Mine Workers they might try to accommodate you.

BY MR. FRAWLEY: I am just surprised at you, that's all.

BY COMMISSIONER MORRISON: Oh, we slip too once in a while.

BY MR. FRAWLEY: In discussing markets, Mr. Dick, it should be kept in mind, I suppose, that there is no duty on Canadian coal going into the United States?

MR. DICK: Well, I can't say for sure now but I think there is a duty on coal going into the United States.

BY MR. FRAWLEY: No, there is no duty on Canadian coal going into the United States.

BY COMMISSIONER McLaurin: Hasn't been since 1932.

BY MR. FRAWLEY: Now I wonder if that should not be kept in mind, if you would care to comment on that situation when you are speaking of developing a greater Canadian market in central Canada, which means of course at the expense of the American coal, doesn't it? Of course there is some United Kingdom coal coming in, and I wonder if you would build up the central Canadian market for Western coal at the expense of the United Kingdom article as well? Have you anything to say about that?

MR. DICK: Well, in regard to that, of course I think a country's ability to buy from you depends largely on what





it sells to you, and Britain has certainly been buying a lot more than what she has been selling to Canada. Now the reverse is the case with the United States. In other words, speaking from memory, we purchased from the United States over 200 million dollars more than what she buys from us, so there is a different problem there, so that from the standpoint of international trade if we are going to cut any coal it should be United States rather than Great Britain; and in addition to that I think after the war, we already have the reflection from the Trade Commissioner, that on account of Britain selling her foreign securities she is not going to have Canadian exchange in order to buy Canadian goods, so that we may have to, whenever we can, purchase coal from Britain and if we are excluding any we would naturally exclude that from the United States. Now I think our trouble is in most of our discussion, we have been selling a meagre 62,000 or 65,000 tons into Ontario; we suddenly start to think about 30 million tons. Now we are going to have to crawl before we can run, and if we can get even a measure of that, a million or two million, whatever we can get, but it will be absolutely impossible in my opinion to ever replace entirely American coal. It just can't be done.

Q All you hope to receive at the moment is a couple of million tons of that American coal market?

A Right.

Q Even though the international trade economists might say that was wrong you say it is not going to hurt anything substantially because we can only hope to get a small amount of it?

BY THE CHAIRMAN: Are we here to help the coal industry or to help international trade?

BY MR. FRAWLEY: I think we have to keep our mind on international trade. If too much Canadian coal for Canadians is going to hurt international trade . . . .



MR. DICK: The imports of anthracite coal, which is a very scarce commodity in the United States--as far as their market is concerned they could sell all the anthracite coal they produce elsewhere. Our imports into Canada is nearly 4,000,000 tons, 3,800,000. That might easily be the first coal we are going to displace in the Ontario market.

Q What did you say about the anthracite?

A There is a shortage and has been for years of anthracite coal in the United States.

Q And they don't care whether they sell us or not?

A I wouldn't say they don't care. It may be like a leader in a store. We will give you so much anthracite if you take so much Pocahontas.

Q That is not the impression I got. I got the impression that they build for this Canadian market at the beginning of the year just as they do for their own.

A If you remember in the last war it was the first restriction that was put on, and that was how Alberta coal got introduced into the Winnipeg market. Winnipeg was told that imports at the head of the Lakes would only be 50% of normal requirements. Winnipeg was using only American coal and in 1918 or '19 the fuel controller, Mr. McGrath, said that west of the Lakes would only get 50% of its requirements. Now it is a funny thing that at that time the Board of Trade and business men of Winnipeg said, "We can't get along with Alberta coal. The city is made of wood and if we are going to use this coal it is going to burn down," and they sent a delegation to Washington to see if they couldn't get additional supplies of anthracite coal and they didn't get it, and they had to buy one ton of Alberta before they could get one ton of anthracite. Now it was the exigencies of war that put Alberta coal into Winnipeg. Ever since that time we had that market. Now we have the anomaly that we are starting to lose that market to a much lower grade of coal.



Q Saskatchewan coal?

BY COMMISSIONER MORRISON: Which shows how much the Board of Trade of Winnipeg today knew of the coal.

MR. DICK: Not today; that was 1919.

BY THE CHAIRMAN: There is a reason for Saskatchewan coal, isn't there? It is a well prepared coal?

BY MR. FRAWLEY: And they have learned how to use it. You say also that you see no hope to increase the British Columbia market after the war. Why do you see no hope of holding what you have, to some considerable extent, from coal control?

A Well, it is expected that it will go back. The tempo of war always increases the consumption of coal. We know that while a certain amount, according to the figures--suppose we refer to that table again--goes into British Columbia.

Q There was a time of course in 1942, but it was building up pretty well?

A Well, the normal amount was around--well, 1935, 200,000 tons; then in 1938, 269,000, so it is expected that it will more or less return to what it was prior to the beginning of the war.

Q What do you say about that 1943, 864,000, no hope of holding anything like that?

A No. Of course you know as far as the Island mines are concerned they are fairly limited as far as their coal reserves; it is a difficult field to operate in. We have now one of the large operators at the Coast owning a mine in Alberta and today shipping a lot of Alberta coal from that mine to the market in British Columbia. There may be a slight increase in British Columbia but we cannot look for any great increase there as compared with what happened prior to the war.

BY THE CHAIRMAN: Is that mine shipping coal, operated by British Columbia men, is it a war measure?





A No, they purchased it and they are operating it. They bought it comparatively recently.

Q But it was in operation before?

A Yes.

BY MR. FRAWLEY: The Island Collieries submission was frank in saying that they found Alberta competition very aggressive. The fact that company has permitted this province itself to make up the short supply would seem to indicate there is considerable hope of holding that B.C. market?

A I don't think it would be anything like it is at the present time, but there may be a slight increase.

Q It should be as good as pre-war and perhaps slightly better?

A That's right.

Q Of course your coal has to face competition from fuel oil?

A That's right. That is one of the reasons for the increase there, the shortage of fuel oil. In other words, the consumption has increased and as the B.C. mines are gauged for a certain production, if they required additional production it had to come from outside.

Q Now in the next section, H., dealing with freight rates, I was wondering if anybody in Alberta had made any application to the Board of Transport Commissioners to institute another investigation of the kind they had carried on in earlier years to see whether or not a trainload movement such as Mr. Gouge advocates would show a lower cost per ton?

A I think if you follow the argument as presented through this, apart from the one we were talking about yesterday, that is the last work I think we have had on that. That was in 1931.

Q I don't believe there has been anything done at all since then. I am simply making the suggestion that perhaps the industry should appeal to this Transport Board, to now initiate a further cost study, which I think is the extent



to which you can get action from the Transport Board at the moment, unless you can show the rate is discriminatory.

A Our brief has come before the all-powerful Royal Commission here.

BY MR. FRAWLEY: Mr. Gouge said the same thing.

BY COMMISSIONER McLAURIN: He didn't say the same thing; he said something worse.

BY THE CHAIRMAN: Faith was lacking.

BY MR. FRAWLEY: Now I think in your K section you overlook just a little something. I want to call your attention to it. There is some protection for Canadian bituminous coal, is there not, in the Tariff Act?

A Yes.

Q What is it, Mr. Dick, do you know? 75 cents a ton?

A 75 cents. It has been quite a time since I dealt with that.

Q Without pursuing it too far, if you think of a pit-head cost of American bituminous of what? At the time it was raised from 50 to 75 cents there was a pit-head cost running sometimes under a dollar, I think, is that so?

A I can't answer that.

Q Because if it were anything even like \$1 or \$1.50 that is a pretty substantial duty?

A Of course the idea in that K section, I would like to deal with that really under the Chamber of Commerce brief, which deals with that matter specifically.

Q Very well. Now, Mr. Stansfield, on page 11-1, just to get the record clear, you have divided the utilization of coal into divisions 1, 2, 3, 4 and 5?

DR. STANSFIELD: Yes sir.

Q Would you be good enough just to continue our education in what we call Fischer-Tropsch gasoline? Under which division would you put the manufacture of Fischer-Tropsch gasoline?

A Under Division 2. We say that the complete gasification of coal for the production of different kinds of gas. One of





these is water gas, or formerly known under the Fischer-Tropsch process as synthetic gas.

Q And in which division would you put the Burgess process?

A The Burgess process is under Division 3.

BY COMMISSIONER McLAURIN: Couldn't you put the Fischer-Tropsch in anywhere? Isn't it more flexible than Burgess?

A Yes sir, any kind of coal. It is just a question of which division you put it into.

BY MR. FRAWLEY: This is just a glossary of utilization of coal, division 1 being the utilization of coal as fuel. What is the relationship between division 5 and divisions 2 and 3, without being too technical about it?

A Division 5 is at the present time largely in the future. It is not very much at present. There is a great deal of research being done on it, with one exception. There is a modification of the hydrogenation process which would come in Division 3 in which they use--perhaps I should go a little further back. In the hydrogenation of coal very finely ground coal is mixed with a liquid medium to be subjected to the hydrogenation process. In a modified process of that they use a medium which is in itself a good carrier for hydrogen and is also a solvent for the coal. It dissolves some of the coal and it exposes it therefore better to the hydrogen. You can carry on hydrogenation under a lower pressure and less expensive conditions than if you use a solvent for the coal as a liquid in which you suspend the coal.

Q In which division would be the product of Pittsburgh known as Disco?

A That I believe is a low temperature carbonization process?

Q Yes.

A That is division 4.

Q Now in Drumheller the other day we were told by an operator that he was having great trouble with the marketing



of his fines. In fact I came away with the impression that that operator--he is perhaps one of the biggest operators--there is no market for Drumheller fines and really it is a question of leaving it in the mine. That seemed to me to be an amazing situation and I wondered if you had given any study to that?

1. We have given very great consideration to that problem and for many years, even before I first came to the West, in 1921, I was personally firmly convinced that the biggest future for, shall we say groups 4 and 5 coals of Alberta would lie in low temperature carbonization followed by briquetting, but the great obstacle at that time, and the great obstacle really ever since, was the discovery or development of a cheap, satisfactory binder, a binder that would have all the qualities of making a strong briquette and not increasing the ash content, but in addition would be cheap, water proof and smokeless if possible. That is a problem that Mr. Lang and myself have been working on for many years. From time to time we have had a brainstorm and gone ahead to try to develop a process but have not succeeded in getting it and so far as I am aware nobody else in the world has yet got a binder that would succeed in filling all those qualifications, but I do think that the situation is gradually changing to make it now much more than practical politics to go ahead with low temperature carbonization and briquetting. Last year we erected a carbonizer in our laboratory, just on a very small scale, with the idea when we started to work to make a fuel to be used in portable gas producers on motor trucks or vehicles. You are probably aware that the normal consumption of gasoline for aviation and motor vehicles has made many people in the world consider how long our oil resources will last, and even prior to the war many European countries were compelling the use of solid fuels instead of oil or gasoline on the



heavier trucks or busses and naturally of course in farm vehicles. That tendency has gone ahead much more during the war years. England I believe has now regulations compelling the use of solid fuels, but it occurred to us that the production of a char from the lower rank Alberta coals, groups 4 and 5 would make as satisfactory a fuel as we could wish for that kind of use in Canada. We felt that that would be a far more practical fuel than the use of either wood or charcoal. Of course we could see limits to this, and we could see the possibility of establishing a market for char from Alberta low rank coals right across the central part of Canada, and with that in view we erected a small carbonizer in our laboratory, but unfortunately other work came in hand to prevent our going on with the work and we did not get our carbonizer operating until too late for the char to be tested, as we had hoped, by the National Research Council in some tests they were making at McGill on the use of char. By the time we were ready to supply it they were just completing their work. However, they are willing to co-operate with us and they have sent a gas producer out for us to make such tests here. We are not quite sure that it is the best kind for such a purpose. If we had had it ready we could have had it tested in several kinds of equipment. If that doesn't work we may be able to exchange it, but I was going to go on to say that we found that carbonizer worked so simply and satisfactorily that we feel that it should open up considerable possibilities for other developments of work with the char. And there is the further question that in the last year or two we have found the operators of this province becoming briquetting and carbonizing conscious. This trouble that you have mentioned in Drumheller, the operators in Lethbridge and the Taber field and a good many other operators are turning towards this problem. Now even within the last six months Mr. Lang has





gone ahead in another direction. Mr. Lang has been doing most of the work on briquetting and he has been taking a briquette, a crude briquette made with a binder that would be smokeless, and has baked the briquette, given it a very quick bake, only about five minutes under high temperature, and making a smokeless out of a smoky, which would also seem to have great possibilities.

Q Using sub-bituminous coals?

A Yes sir, our low rank coals, 4 and 5. 3 could also possibly be used. I would like to just say this, that in our ideas about carbonization we are taking advantage of the free-burning, non-coking character of the coal. Low temperature carbonization has been practised in a great many places. In the past it has been with coking coals and they have had very great difficulties and the industry has spent many millions of dollars even without any return at all. We are taking advantage of the fact that these coals we are proposing to treat do not soften and therefore can be run down in a stream, a natural stream, exposed to the temperature required, and it is a very simple matter of operation, exposing it in a thin layer to the necessary heat. We are also steering clear of by-products recovery. To do any ~~by~~products recovery would mean a very big extra expense in operation, in working up the recovery, and at the present time we have no knowledge that these by-products have any value commensurate with the cost of recovery. I don't say that will be the case in the future. You are probably aware in the first gas-making plants in Europe the ammonia liquor and tar were the gas-makers biggest bug-bear. Now of course they are the basis of the dye and fertilizer industries. At the present time we don't know of any particular value to be got out of the by-products from the low temperature carbonization. We know that we can operate it much more cheaply by avoiding that. We don't have to bring the heat in from the outside; we can



generate the heat in the retort. I would just wish to show you the point I am getting at. I am discussing here certain coal, the moisture in the char and the baked briquette. The moisture was 28% in the coal, nothing in the char, nothing in the baked briquette. The ash of course goes up: 5% in the coal, 10% in the char, 12 in the baked briquette. We would need to use a clean coal; we can't use a dirty coal because the ash goes up, so it would be necessary to use a clean coal. Volatile matter starts at 28, down to 12 and 10. Fixed carbon starts at 39, goes up to 78. Heat value 8,500 in the coal, up to 13,000 and 13,110. In other words the baked briquette is practically the equivalent of anthracite in heat value, smokelessness and storeability.

Q Except ash?

A Well, 12% ash is a great deal less than a great deal of the anthracite that comes into the country at the present time. One difficulty that we ought to face, however, is that the so-called Western coals, our prairie coals, are usually a little low in fusion temperature; they are a little apt to clinker. Personally I burned briquettes with a clinkering coal in Ottawa in an ordinary furnace many years ago. I developed a simple method of running this furnace and the removal of the ash as a clinker was less trouble and dust and mess than if the coal had been a high ash fusion, so it is a matter of education, I submit. There may be furnaces, small furnaces, that have to be forced too much, they are not satisfactory, but on the whole it is not a difficult situation. I left out of the story, in making those briquettes we mix with the char a coking bituminous coal. In the briquettes we have made-- I have samples here--we mixed 75 parts of the char with 25 parts of the coking bituminous coal, and in the baking process the real binder in holding the final briquette together, giving it the strength that it has, is the





is the coking bituminous coal in the briquette.

Q Does that make much difference in the cost?

A It would increase the cost a certain amount. I would visualize a community briquetting plant in Drumheller valley that would treat the fines from all the collieries there that would wish to supply it and would have a coking bituminous coal from somewhere to the West, which would be treated as and given an in-transit freight rate at Drumheller. I think that is possible, that the coal could be stopped for an operation and go on again without having to pay a double freight.

Q There is a real distinction then between making a briquette from the bituminous coals such as at Canmore and Nordegg and the sub-bituminous at Drumheller?

A The char at Drumheller.

Q What is the real reason for the difficulty in briquetting?

A If you are trying to briquette a bituminous coal you have got to remember why we call it that is it has bitumen qualities in it; it really has an inherent binder in it. If it is a coking coal when it goes into the fire it cokes and the briquette may get even stronger after it has been fired. If it is a non-coking coal it has not the coking property in it, you have perhaps to put a little more binder in it.

Q The work you have been doing on this char is by using these sub-bituminous coals 4 and 5 and Drumheller is in that group?

A Yes.

Q Have you had any co-operation from the Drumheller people? Do they agree with you that that is where a solution lies, in making a char and briquetting?

A We have not discussed this matter widely at all as yet. We are considering patent production for the carbonizers and we have not been discussing it very widely. We have not been keeping it a strict secret. I discussed it with a Drumheller operator a fortnight ago in Calgary. Some of



the operators know about our work and we have had one offer already of assistance.

Q What you say about Drumheller, the same would apply to Edmonton? They are to some extent the same rank?

A Yes.

BY COMMISSIONER MORRISON: You don't have the same trouble in Edmonton disposing of the fines?

A No.

Q In fact some of them at least in order to get their share of the orders have ground up some of their lump coal in order to supply orders?

A That's right.

BY MR. FRAWLEY: Are you aware what they are doing in Estevan with the briquetting of coal?

A Yes, it is a similar matter only they are using the binder without a baking process afterwards. They don't mix in a bituminous coking coal and their briquette is a simple smoky briquette. It is the same sort of idea and I don't wish to rule out the possibility of doing the same thing here, leaving out the coking.

Q How does the ash content of the result at Estevan compare with the ash content of your result?

A Could you let me check?

MR. LANG: Very similar.

BY MR. FRAWLEY: The ash goes up in theirs as in yours?

DR. STANSFIELD: Theirs is a lower rank coal to start with. It would go up more than ours.

Q The work you are doing is entirely in the experimental stage, and as you say, after you will do something to bring it to the attention of these operators?

A We hope in a short time to go ahead and try it on a larger scale.

Q You do say in your view that line of investigation is often a suitable field rather than low temperature carbonization for the supply of the chars and volatiles?



A Emphatically so.

BY COMMISSIONER MORRISON: How about the cost? Would the cost make that prohibitive?

A It is a little hard to say, sir, at the present time what the cost would be. I am not an expert but I have made preliminary estimates and I came to the conclusion that it was feasible. That was my own feeling, but I may be wrong.

BY MR. FRAWLEY: Have you given it any thought? Perhaps you might have some views about this. This thing does seem to be working very well in Estevan?

A Quite right.

Q Why is the work in Alberta still being left to you, the Research Council, to work out? Why isn't there an Estevan operation in the Drumheller field, or in the Edmonton field?

A Possibly if you go back into the history. The Lignite Utilization Board was formed in 1918, I believe, to look into this matter and erected a large plant in Estevan. They tried in those days to make a product that would have recoverable by-products. I was connected with the Board. I may say even in those days I said I didn't see anything to gain but the Board took the attitude they would receive severe public criticism if they could not obtain by-products.

Q Was that when they were using the Nergie process?

A No, before that, they were using the Stansfield process, I am sorry to say. Afterwards, that was not successful for a good many reasons, they tried a retort that was obtained from the Bureau of Mines, indirectly, and all the information I got--I had left the Board then, was that that was highly successful, but the provincial governments concerned had been given to understand at the formation of the Board that all they had got to do was provide the money and the plant would be erected and would be going up as a war emergency measure to produce briquettes to supply all the market that was commencing, and I think it





was a very bitter disappointment to find it was still in the experimental stage, and it had to go on producing more and more money without results and finally the different governments concerned put their foot down, or their feet down, and said, no more money, and then it was sold to a private enterprise, I think just for a nominal figure.

Q That is why we hear there is no capital cost in that operation?

A No capital cost. Two or three people have tried it. Each time I think it was transferred from hand to hand at practically no cost.

BY COMMISSIONER MORRISON: The capital cost was taken up by the taxpayer?

A Exactly.

BY MR. FRAWLEY: At the moment it is quite a successful operation?

A Quite a successful operation, but I think that answers the question, that an operator in this province would have to put in the whole capital cost and would then be competing with a concern that had no capital cost.

Q But anyway you do look to that as a future for the disposal of those Drumheller fines, which at present have to be left in the mine?

A Yes.

Q And which I am told run as high as 40%?

A Yes.

Q So that is a pretty important situation?

A Yes.

BY COMMISSIONER MORRISON: Let's get the record straight.

You are not suggesting that fines from Drumheller coal are 40 per cent?

BY MR. FRAWLEY: That is what we were told.

BY COMMISSIONER MORRISON: There is no evidence before this Commission.



BY MR. FRAWLEY: You are quite right about that. I should not be saying what I am told, but that is what one operator told us.

BY COMMISSIONER MORRISON: You will learn not to believe everything that operators tell you.

BY MR. FRAWLEY: I don't think I will ever get to your stage on that.

BY COMMISSIONER MORRISON: I said everything. Mr. Dick is a practical mining engineer. Would you say there was 40% fines in Drumheller?

MR. DICK: I don't know there would be anything like that.

BY COMMISSIONER MORRISON: In fact not half of that.

BY MR. FRAWLEY: Mr. Dick, just perhaps another question. In your Summary of Recommendations on page R-1 you refer to "the federal government be urged to negotiate an American-Canadian reciprocal arrangement whereby Canadian western coal might freely move to western United States points as against similar importations of American coal to mid-Canadian points." Now I don't want to read more out of that than is in there but that doesn't suggest, does it, that we would limit our importations into central Canada by what we could export from Western mines into western United States?

A Not at all. And another thing, it had been explained previously in the brief that the Interstate Commerce Commission--even if you had an arrangement with the United States government that would not be binding as far as helping this out for the freight rate, etc., is changed by the Interstate Commerce Commission and there is no doubt if we were supplying coal into the United States and started to interfere with their own market we would soon be chased out.

Q You think that upon application by the Utah operators, for instance, that were being displaced they would make a rate





sufficient to let them get that market back?

A That's right.

BY COMMISSIONER McLAURIN: You are not stating the thing right.

You have first got to go to the Interstate Commerce Commission to get a rate. The people who would have to go there first is the Canadian operator.

MR. DICK: If I remember rightly, speaking from memory, years ago coal from the Lethbridge field used to go down into the United States and also coal from the Crows Nest Pass, going down into the State of Washington, etc. Well, with the development of the Montana field and also the Utah field we couldn't get from the Lethbridge field a through freight rate say to a point in Montana. We got a rate down to say Couatts or Sweet Grass and then that became the point of origination, and we got the freight rate from there to where we wanted to sell it. It was naturally excluding a lot of coal in that field. The first part of the haul takes up most of the freight rate. We paid the big bulk of the rate and then started fresh again on a rate from there which meant straight exclusion.

Q The coal now going in there enjoys a reasonably good rate from the Interstate Commerce Commission?

A I don't know anything about that.

Q Perhaps this is so, that Solid Fuels in Washington is probably a party to it?

A You have got to consider that it is a war emergency.

Q What I am interested in is this, that the Interstate Commerce will give a rate to enable it to capture a market, and if that is so it is the very opposite to what the Canadian Board of Transport Commissioners will do. The Board will not require a railroad to carry traffic so as to gain a market in a particular section of Canada. Mr. Matheson tells me he understands that the Interstate Commerce Commission is similar. Mr. Tanner's submission here with regard to the method here of leasing lands, I



I just have one or two questions. Mr. Tanner, when we were in Nova Scotia we called attention of the Nova Scotia government to the fact that their royalty was  $12\frac{1}{2}\%$  a ton and in Alberta the royalty was 5% a ton, but of course here you have a yearly rental of \$1 an acre and in Nova Scotia they have a yearly rental I think of \$30 a square mile. Would you care to say anything about the reason why you have about \$640 a square mile rental as against their \$30?

BY THE CHAIRMAN: It takes up the slack in the royalties.

BY MR. FRAWLEY: Their point is that certainly takes up the slack between their  $12\frac{1}{2}\%$  and your 5.

HON. MR. TANNER: Before the natural resources were transferred to Alberta there were large areas of coal producing property that had been sold and on some of that they retained a royalty. Now the royalty is small on that and it is also small on the property owned by the Province, but we charge a rental on what is owned by the Province so we have kept our royalty low, the same in both places, and we charge a rental on our land.

Q The land over which you have complete control?

A Yes.

Q Now the land which was alienated to private people by coal sales, do you charge any rental to them?

A No.

Q Under the terms of the contract you could not impose a yearly rental on them?

A That's right, just a royalty.

Q The royalty you do impose is the royalty imposed by the Dominion Crown at the time of the alienation, or do you vary that?

A We have not varied it. I think it has not been varied at all.

Q That was generally about 5 cents a ton?

A 5 to 7, I think.



Q 7 cents a ton, yes, your brief says so. At any rate it would seem that the rentals you collect do go a long way to make up for the difference in the rate per ton of royalty that you charge?

A Yes, I think it does.

BY THE CHAIRMAN: I was looking at a question here some time ago that a royalty of  $12\frac{1}{2}\%$  in Nova Scotia, plus the \$30 per square mile, would be about the equivalent charge to your per ton royalty and rentals?

A Well, I don't think we could say. On account of the production on certain areas and the amount of leasehold there may be a great variation, but it certainly would take up a lot of the slack.

Q I raised the question in Nova Scotia myself. I thought they were getting too much royalty down there.

BY COMMISSIONER MORRISON: In Table 1 you say "subsidies to railways"?

A Well, that is the land that was given to the railways as subsidy at the time these railways were constructed.

Q What railways do you have in mind?

A Canadian National, Canadian Pacific and C. & E.

BY MR. FRAWLEY: On page 3 of this supplementary brief you say there is considerable coal mined in the province not subject to Crown royalty, then you say, "It might be remarked that leases of freehold coal require the operator to pay royalty at varying rates, ranging up to 50 cents a ton." Does that take care of any provincial mine? Where is coal paying 50 cents a ton royalty?

A Well, that is royalty that is charged by individuals who own the coal rights.

Q You mean they turn around and sublet it?

A Yes, not by the Province. The Province gets nothing out of it.





Q We had this question raised in Nova Scotia. Have you got any control over the subleasing of coal lands, starting with your own, of course?

A Any sublease is registered only on the approval of the Minister. The assignment is allowed unless there is some good and sufficient reason for refusing to register it.

BY COMMISSIONER McLAURIN: You are only recognizing an unconditional assignment?

A Yes, that's right.

BY MR. FRAWLEY: The same as in the case of petroleum and natural gas leases?

A Leases.

Q What I am thinking of is the amount of royalty reserved in the subleases?

A No, we do not.

Q In Nova Scotia there is a rule of practice grown up there that they will not approve a sublease if it carries a royalty of more than so many cents.

A Yes. I am sorry, I was thinking of assignments. Subleasing--during the last year particularly we have been considering some such regulation because we think it is in the best interests of the industry to have it.

Q But at the moment you would approve a sublease even if it carried 50 cents a ton royalty?

BY COMMISSIONER McLAURIN: He would not approve the sublease. He would not even know it existed.

A Subleases are not controlled by us; just an assignment.

BY THE CHAIRMAN: Who pays the royalty, or whatever you have?

A The man who holds the original lease. If there is a sublease, then the only person we know, as pointed out by Commissioner McLaurin, the only person we recognize is the holder of the original lease. If an assignment is made and we register the assignment . . . .

BY MR. FRAWLEY: Now you have a statute known as the Mineral Taxation Act. Would you just put on the record a word



about that, insofar as it affects coal?

A The Mineral Taxation Act was introduced, passed, I think in 1938 and 1939 but did not include coal, because coal at that time was subject to taxation by the municipalities.

Q That is ordinary assessment?

A Yes. Now the Act that was passed in the last session, this year, 1945, we have included the coal in the Mineral Taxation Act. Now to state what the returns from the including of the coal--we have not been in a position to estimate that at all accurately but we do have an estimate of what the total mineral tax will give us for the year.

Q So the Commission will understand, the Mineral Taxation Act is directed against coal land?

A Owners of all minerals.

Q Thinking of coal, it would be directed against the people who own coal rights in fee simple?

A Yes, and in regard to that there are two ways that that property is subject to taxation under the Mineral Taxation Act. If it is land under which they own the minerals those minerals are not separated. Mineral rights are taxes where there is no development. Now that tax is one cent per acre under an order-in-council just passed last week. Now under the land where development has been carried on there is an assessment according to the value placed on that property by an assessor and then there is a levy and the maximum levy is 10 mills, but that has not been set for this year, but the maximum that can be charged is 10 mills and the value of the property is determined by an assessor. It may vary in some areas. We will have them producing gas, oil, coal, and some all of them, and they assess the property according to production.

BY COMMISSIONER MORRISON: According to production?

A Production value. Here is what we do. Take the Turner





Valley, for instance.

BY COMMISSIONER MORRISON: Well, let's think of coal.

A We have not yet assessed coal. That is a new thing this year as far as the province is concerned.

Q Will the holders of freehold property be required to pay equivalent to one operating on a Crown lease?

A No, he will not.

Q He will still get by easier under this new set-up?

A Yes.

Q Than the fellow that has a Crown lease?

A Oh, definitely.

Q Why?

A There may be two or three good reasons that I can mention. One is, he is owner of that property. He purchased that property and has some interest in that property that a lessee hasn't got. If it were given to him as a bonus for constructing a railroad, well at least the Federal authorities thought at that time that he had done sufficient work to justify that grant.

Q Let's not go into what they were thinking.

A Well, the individuals who own it have that right the same as if they had purchased it and have some interest there that the lessee has not got.

BY MR. FRAWLEY: It is perfectly obvious but I want to make it abundantly clear, this Act is not directed against the Crown lessee at all?

A Not at all.

Q Against the few people who own coal lands outright?

A Yes; and all minerals.

Q The C. & E. Corporation?

A Yes.

Q The C. & E., Canadian Pacific and Hudson's Bay, and a good many individuals throughout the province?

A That's right.

Q That is for the Chairman's benefit because in the Province of Nova Scotia nobody owns coal but the Nova Scotia Govt.



AFTERNOON SESSION

The Commission reconvened at the Court House, Edmonton, Alta., at 2.00 P.M.

BY MR. FRAWLEY: Mr. Hyndman will present the brief of the Northern Alberta Coal Operators' Association.

L. D. HYNDMAN. Examined by Mr. Frawley.

Q You are counsel for the Northern Alberta Coal Operators' Association?

A That's right, Mr. Frawley.

Q And you want to present their brief?

A Yes.

Exhibit 140 - Brief of Northern Alberta Coal Operators' Association

MR. HYNDMAN: May I say at the outset that primarily this brief deals only with the purely local problem. It is in the following words:

BY COMMISSIONER MORRISON: Who are the members of that Association?

MR. HYNDMAN: They are listed in the schedule at the end.

The names are all given. Do you wish those read?

Q No. They are all in good standing, I take it?

A Well, just what good standing means I am not prepared to say.

Q You know what good standing means in the Bar Association?

A Oh, definitely.

Q It is the same thing.

MR. HYNDMAN proceeds to read brief, Exhibit 140:

This brief is submitted on behalf of the Northern Alberta Coal Operators Association, whose members operate coal mines in the districts adjacent to Edmonton, Wabamun, Tofield and Camrose, all mines being located within a radius of 55 miles of Edmonton.

The mine workers, except in the cases of two open cut mines, are members of the United Mine Workers of America.



What is known as "domestic" coal only is produced, which is good grade sub-bituminous, for use mostly in domestic heating except for that consumed in local power plants.

Operations have hitherto been of a seasonal nature, and this is inevitably true, notwithstanding the limited stocks that may be laid in from time to time during the summer months, by home owners. Efforts to induce consumers to lay in stocks during the summer months have not proved successful and cannot be expected to do so. However, there remains a small demand during the summer, which permits a certain amount of essential development being undertaken in preparation for the coming winter.

The fact that operations are of a seasonal nature is of great consequence to the future of the industry and about this fact revolve the major difficulties concerning it.

Seasonal operations result in:

1. materially increasing the cost of production and thereby making fair competition with gas almost impossible, and having regard to existing fixed prices occasion Government subsidy, which will be referred to later in this brief.
2. the creation and perpetuation of circumstances which stifle any incentive on the part of men to become miners or mine officials, and on the part of capital to open new mines or improve existing plants, notwithstanding the existence in the area of many potential coal seams of commercial value.
3. inability to plan economically for the extraction, handling and distribution of the product.

BY COMMISSIONER MORRISON: At that point, the distribution of the product, you are aware that there is some form of co-operation existing between members of your association in distributing some of the grades, at least, of coal they produce?

MR. HYNDMAN: Yes.





BY COMMISSIONER MORRISON: And what are the views of your association in that regard? Has it worked out satisfactorily on the whole?

A Are you perhaps referring to the purely local distribution?

Q Yes, Mutual Coal Sales Limited.

BY MR. FRAWLEY: What is Mutual Coal Sales, Ltd.?

A It is a limited company which operates as a general distribution centre for the products of the various mines in the Edmonton area only.

Q Of all those companies listed?

A No, because some of them are outside the local area.

BY COMMISSIONER MORRISON: And you would say, on behalf of your association, that the voluntary plan brought into being, Mutual Coal Sales Limited, has been a help to the coal operators in general?

A I believe that is true. I would like perhaps to consult with my principals on that before I answered it definitely but I believe generally that is true.

BY MR. FRAWLEY: Is it a compulsory arrangement?

A No, it is voluntary.

Q So that any one of those companies, Mr. Starky's for instance, can sell through Mutual Sales or anybody else?

A I believe so.

BY COMMISSIONER MORRISON: Mr. Starky was one of the prime movers in the organization of Mutual Sales?

A Whether he was a prime mover or not I don't know. He was one of those who started it.

Q Well, one of the prime movers then? A gentleman by the name of Hyndman was another? Not L. D.

BY MR. FRAWLEY: Is its success due to the fact that it is not compulsory?

A That is a matter of opinion upon which I cannot express a view.

Q Perhaps this would be a good time to explore the compulsory as opposed to the voluntary?



BY COMMISSIONER McLaurin: No, no. This just relates to Edmonton.

BY MR. FRAWLEY: Just from the acorn grows the oak, and if it is a good idea . . . .

MR. HYNDMAN: I believe it worked out satisfactorily over a number of years.

BY COMMISSIONER MORRISON: I have some knowledge of it and I believe you are expressing the opinion.

BY MR. FRAWLEY: Is Mr. Clark's coal sold through this agency?

MR. HYNDMAN: It was, I think. (Continues brief):

4. the development of tendencies among the workmen and officials below and above ground, robbing them of personal initiative and incentive. This moral effect upon many persons engaged in the industry, and in no small measure their families, is possibly the most disturbing result of the seasonal nature of the industry and cannot be over emphasized. The results over the years will tend to produce a moral break-down, just as did the great depression to many persons caught in that disastrous whirlpool.

These remarks are in no sense intended to reflect upon the workers in the industry, for on the contrary the men are by and large, loyal, industrious, and clean-living workmen ---

BY COMMISSIONER MORRISON: They couldn't be anything else, having regard to the Union to which they belong.

MR. HYNDMAN continues brief:

. . . but the remark is made because the tendency to disruption of character over a period of time is present and cannot be avoided unless conditions are altered. In this regard it would be no less true of any other lines of endeavour.

A most important aspect of the local problem being its seasonal character demands study of how this can be overcome to enable the mines to operate on a more constant basis over the whole year.





Storage of this coal in large stock piles (except for steam purposes where the consumption is large), is not feasible for various reasons:

space, handling, deterioration, and tendency to combustion.

It has been suggested that one solution may be the establishment of a by-products plant, which might absorb the bulk of summer time production and leave the mines free to supply the existing market in winter time. The scientific aspects are not sufficiently known to these operators but it is understood that the Commission will hear evidence from other sources in respect to this possibility. The market being limited and the price being limited by the price of competitive fuels, a solution to this all important problem must be found or the mines can only continue to operate under Government subsidy.

#### MARKET - 1944

Of all the coal mined in the Edmonton district, less than 5% was sold out of the Province of Alberta. Only a small percentage of the coal mined in Wabamun, Tofield and Camrose was marketed outside of the Province of Alberta.

Should circumstances result in the closing of more Edmonton and district mines, which at the time of preparation of this brief is a decided possibility . . .

I may say, Mr. Commissioners, in addition to that statement I understand that since that time the Beverley mine has in fact closed down, and as is mentioned in the schedule at the end, one other mine, the Kent mine, I believe has given notice of abandonment.

BY COMMISSIONER MORRISON: In the case of Beverley it wasn't due to some of the causes that you are enumerating in your brief that it closed down?

MR. HYNDMAN: I don't quite follow you, Mr. Commissioner, there. You mean the causes I have already referred to?



BY COMMISSIONER MORRISON: Weren't there some economic factors that entered into the closing down of that mine?

MR. HYNDMAN: I believe the uncertainty about Government orders . . .

Q Wasn't there some question about coal reserves?

A That was no doubt a factor.

Q Wasn't it the deciding factor?

A I don't know the answer to that but I believe there were some coal reserves, but whether they were sufficient to justify continued operation I don't know.

Q Not economically feasible I believe was the language used here this morning, to allow these coal reserves to be worked.

A I understood it could have gone on for some time but undoubtedly the time would have come in the not very distant future when they would have to consider that.

Q Perhaps the question--we heard something about royalties this morning, that might have been one of the factors?

A Possibly. We would no doubt have to call the manager of the mine to ascertain that exactly. (Continues brief):

Should circumstances result in the closing of more Edmonton and district mines, which at the time of preparation of this brief is a decided possibility, the local market cannot be supplied locally, but will have to be supplied from other fields. This will inevitably result in a greatly increased price to the consumer. The best grade coal locally mined reaches the consumer in the city of Edmonton at a maximum price of \$5.15 per ton; whereas coal from any other field will cost a great deal more, dependent upon the field from which it comes.

With proper development our natural market would include Alberta, Northern Saskatchewan and Manitoba. I think that should read Northern Manitoba.



WAGES

The United Mine Workers of America, which represents the mine workers in our mines and in the mines operating in the Drumheller field, recognized over 10 years ago that, if our mines were to continue in operation, the differential of \$1.00 per day in the wages paid to the mineworkers must be continued, and this differential was established in agreements signed by the operators and the Union.

BY COMMISSIONER MORRISON: Now at that point, as a practising barrister there are times when you made agreements on behalf of your clients. It is not the agreement that you set out to make and just because you compromise on behalf of the client in the making of the agreement it doesn't necessarily follow that you recognize the differential as being a just one?

MR. HYNDMAN: While that is probably true in that particular instance it doesn't necessarily follow in this. Do you wish me to argue that?

BY MR. FRAWLEY: The fact remains that the miners in the Edmonton district are getting \$1.00 less than the miners in the Drumheller district mining the same kind of coal?

MR. HYNDMAN: Yes. (Continues brief):

In July 1943, the National War Labour Board granted an increase in pay to mine workers employed by our members of \$1.16 a day, retroactive to May 16, 1943, and ordered that all time worked by above ground workers over 8 hours per day, instead of over 9 hours per day, as was then the practice, be paid at the rate of time and a half, to bring the wages into line with those being paid in the Drumheller field, and this was done, in spite of the fact that our members had agreements with their mine workers represented by the United Mine Workers of America, fixing wages until one year after the expiration of the war, and that our members were paying the regular cost of living bonus. During





the fall of 1943-44 the mine workers went on strike and the Dominion Government appointed a Commission headed by Mr. Justice G. B. O'Connor, to investigate and deal with the situation.

BY COMMISSIONER MORRISON: And other very eminent gentlemen.

MR. HYNDMAN: There is no need to elaborate on the various members of the Commission. (Continues brief):

The Commission awarded a further increase . . .

BY COMMISSIONER MORRISON: And the Commission made that award on the merits and justice of the case, Mr. Hyndman?

MR. HYNDMAN: Well, I would not be prepared to know what was in the minds of the Commission.

BY COMMISSIONER MORRISON: As one member of that Commission you would say that was the case?

MR. HYNDMAN: Conceivably. (Continues brief):

The Commission awarded a further increase in the standard day rate of \$1.00 per day with two weeks holidays with pay per annum to all mine workers who put in a certain number of days work in the previous year. Corresponding proportional increases were given in the contract rates for miners.

In addition to the foregoing increases there has been paid a cost of living bonus of 77 cents per day.

There has been a large increase in Workmen's Compensation assessments, not only because of the percentage of payroll being paid on the increased wages but also because the percentage itself has been substantially stepped up to cover increased benefits to injured workmen and their dependents.

The following statement illustrates the increases referred to:



	1940	1944	Increase
Miner's daily wages	\$4.41	\$7.34	66%
Price of Lump coal per ton Edmonton	4.75	5.15	8.4%
Compensation rates	6.5%	11%	69.2%
Compensation daily rates	\$0.28	\$0.80	185%
Cost per man per shift	\$0.28	\$0.80	

BY COMMISSIONER MORRISON: It shows what a large percentage you get when you start with a low base.

MR. HYNDMAN: Well, when you are really organized for action, Mr. Commissioner, it doubtless shows how much you can increase your rate. (Continues brief):

#### COMPETITION

Prior to the development of the present national coal shortage we had to contend with two different kinds of competition, namely:-

##### 1. Competition from Coal Mines in the Drumheller Field

The Drumheller mines were able to secure a price of \$1.00 per ton higher than we could get in open competition, because their coal has--

- (a) a glossier appearance with appeals to most customers;
- (b) a lower moisture content, which means that it slacks less in storage;
- (c) a slightly higher heating value.

Even with the differential in the price, the Drumheller mines supplied a much larger proportion of the domestic coal requirements of the Prairie Provinces than ours. Under present war control the Drumheller mines are allowed to charge approximately \$1.00 per ton more than our members.

##### 2. Competition from Natural Gas.

Prior to the introduction of natural gas into the city of Edmonton, the coal mines in the Edmonton field had developed a large business, shipping coal to Edmonton and across the Prairie Provinces. It has been estimated that about 65%





of the output of these mines was marketed in the city of Edmonton. However, natural gas was brought into the city from the Viking field, about eighty miles to the east, and for the first time it began to invade the domestic fuel field in the winter of 1924-5. At first competition from this source was only slight, but as the Gas Company gradually extended its distributing lines in the city of Edmonton, more and more of the domestic fuel business passed over to the Gas Company. The effect of competition from natural gas, however, did not become serious until about the year 1932, by which time the Gas Company had been able to supply gas at attractive rates for the office and business blocks and industrial premises. In the year 1934, a substantial reduction was made in the price of natural gas for domestic consumers. The result has been an increasing switch over from the use of coal to natural gas for heating purposes in the city of Edmonton, and it has been estimated that, by the year 1940, about 80% of the city's total domestic fuel requirements was being handled by natural gas.

The result of this competition has been that our members have been unable to raise the price of their coals; but on the other hand, they have had to face increasing costs.

#### DEVELOPMENT OF THE INDUSTRY

Prior to the commencement of the present war, domestic coal mining industry in Western Canada was greatly over developed. Since the outbreak of war there have been times during which there has been a shortage of coal to fill the demand. This has been due to two causes; the shortage of mine workers due to enlistments, resulting in an inability of operators to produce up to the maximum of plant capacity; and the switching over by many farmers from the use of firewood to coal, partly due to the fact that timber supplies are gradually being used up, but also because the farmers are generally financially better off, and prefer to use coal



rather than firewood when they can afford it. Whether they will revert to the use of firewood to any extent after the war will, of course, depend on the prevailing prices of products of the farm.

At the present time there is no ~~over~~-development except insofar as there would appear to be over-development in the summer time due to the seasonal nature of the industry as referred to above. On the assumption that the existing local market remains and that the market can be further extended in Saskatchewan and Manitoba, as suggested, there is reason to believe that there is opportunity in this field for further development of coal resources, which can probably be best done by increasing the output of existing mines. However, this cannot be expected unless the operators are assured of continued and certain Government subsidy.

#### SUBSIDY

As mentioned above under the heading of "Wages" the Emergency Coal Production Board has provided assistance by way of subsidy not to exceed the standard profits with a maximum of 65¢ per ton. Because this subsidy is uncertain and because the Government will give the operators no assurance that it will be continued, the whole matter of subsidy is most unsatisfactory. To be of any value the amount of the subsidy must be known in advance by the operator, otherwise he is naturally loath to enter upon any plans and expenditure for future operations. It is quite useless for the operator to be merely assured that he will receive the subsidy for the next month or two. He must have assurance that he will receive the subsidy over at least the following twelve months, and preferably he should be assured of its receipt two or three years ahead of his planning and expenditure. It must be realized that mine developments demand large expenditures of capital for use over a long period of years.



The operators realize that if they are to receive Government subsidy they must expect some form of Government control, and in this they are willing to co-operate; but it is felt that this control must be exercised by some Government appointee, or Board, or Commission, which consists of men thoroughly conversant with the mining and marketing of coal. This has been lamentably lacking in the past.

#### RECOMMENDATIONS

Having regard to what has been said above, this Association respectfully offers the following recommendations:

1. That a Dominion Government subsidy on a fair and sufficient basis be continued long enough to justify operators developing output and market.

May I just add to that, Mr. Commissioners, that it is felt to be essential that some better understanding of this problem be arrived at in the immediate future. In the event that your Commission will ultimately deal with it, of course, and the Government may act upon such recommendations as you may make, well and good, but there is, I gather, a good deal of work for you to do before that recommendation can possibly be made, and I am instructed to suggest that if it were possible for the Commission to make some interim report to the Government or to the Emergency Coal Production Board with respect to giving some assurance that this subsidy will continue, these operators will be able to plan their future; otherwise some might have to go out of business.

BY COMMISSIONER MORRISON: Have you had any communication with the Emergency Coal Production Board?

MR. HYNDMAN: I am informed that no operator has ever at any time been able to get the assurance of the Emergency Coal Production Board that the subsidy will be continued for any definite time. They are more or less assured that this month they will get it, or the month after, but beyond that they never have any assurance. As a consequence they are not





prepared to make any capital expenditures of any amount, and that means that the industry is not being adequately developed at the present time.

BY COMMISSIONER MORRISON: Have you approached the Emergency Coal Production Board on that matter?

MR. HYNDMAN: I would not be able to answer that question with any assurance.

BY COMMISSIONER MORRISON: You are asking this Commission definitely to make certain representations to the Emergency Coal Production Board which first of all you yourselves should take up with the authorities.

MR. HYNDMAN: It has certainly been taken up with the authorities, but precisely what has passed between them and what assurance, if at all, they have received, I would hesitate to answer the question. (Continues brief):

2. If control is to be exercised by Government authority, such control should be vested in persons having a profound knowledge of the problems of the industry.
3. Research as to the use of coal and its by-products, including equipment for the more efficient consumption of coal.

#### List of Members and 1944 Tonnage

Northern Alberta Coal Operators' Association,

Edmonton

<u>Name</u>	<u>District</u>	<u>Tons</u>
Alberta Coal Mine	Cardiff	5,316
Beverly Coal Company	Beverly	41,146
Bish Brothers	Forestburg (approx)	9,000
Crown Coal Co. Mines		
Banner	Carbondale	55,168
Kent	Edmonton	45,837
Starky	Namao	2,782
Edmonton Collieries Ltd.	Namao	26,597
Great West Coal Co.	Clover Bar	83,145
Lakeside Coals Limited	Wabamun	65,935



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L. D. Hyndman

<u>Name</u>	<u>District</u>	<u>Tons</u>
Ottewell Coal Company	Clover Bar (approx)	10,000
Riverdale Coal Company	Namoo	13,276
Red Hot Coal Company	Edmonton	21,000
Red Flame Coal Company	Round Hill (Camrose)	31,088
Tofield Coal Company	Tofield (approx)	50,000
White Star Mine	Rabbit Hills	7 611
	TOTAL	467,901

COMPARATIVE OUTPUTS - EDMONTON DISTRICT

<u>YEAR</u>	<u>TONNAGE</u>
1923	588663
1924	675285
1932	454293
1940	483942
1944	311878

Tonnage for 1944 does not include output of a few small mines, perhaps 10,000 tons. Actual figures are not available.

EDMONTON DISTRICT INCLUDES:

Edmonton	Namoo
Clover Bar	Rabbit Hills
Carbondale	Strathcona
Cardiff	

Two mines in the Edmonton District, which operated in 1944 have given notice of abandonment. Their approximate combined output in 1944 was 86,983 tons.

BY MR. FRANKLEY: You realize of course that when you talk of continuing this subsidy you are probably almost alone in Canada, subventions are no request of your operators?

A No.

Q So you say you want this wartime subsidy to continue?





A It is either one of two things. Either the industry here goes under completely and the local coal industry is eliminated from the national picture, or the subsidy must continue.

Q This wartime subsidy is a concomitant of price control?

A Oh yes.

Q You are given this subsidy because you must sell under the ceilings of the Wartime Prices and Trade Board? That's all it is?

A Not entirely, because it is in competition with gas.

Q It must be another kind, because you had competition with that long before the war?

A That may be, but we couldn't raise the price of coal even if the price controls were removed without running into competition with gas. That makes a subsidy necessary.

Q That is very completely put out here. You are in this position, that you actually have to have a prop put under you to help you with an ordinary peacetime competition?

A In the case of many mines, yes.

BY COMMISSIONER MORRISON: How do you reconcile that statement with the position that you take that if these mines go out of business in Edmonton that coal which is brought from outside will sell at a much higher price? You were worried about the coal operators in one breath and you appear to be worried about the consumers in the next breath. You say if the mines you represent go out of business then coal brought from outside, your consumers will have to pay more money for it. How do you reconcile the two positions you take?

A I think I will have to call some expert evidence on this because evidence of prices--I am not familiar with prices, market conditions.

BY MR. FRAWLEY: Mr. Morrison is calling your attention to this, that that outside coal would have to face that gas competition?



A Yes, that is true.

Q I think your basic proposition is that if you go out of business--well, I don't know. There will always be some coal consumers?

A Yes, there will always be some in Edmonton. How many there will be in the face of gas competition in the future when they can extend their lines further I don't know.

BY COMMISSIONER MORRISON: Wouldn't that indicate that perhaps in some instances at least it is not too late yet for the Edmonton coal operators to put their house in order and get a fair and equitable price for their product, which your brief certainly doesn't suggest you are getting now?

BY MR. FRAWLEY: Don't you think your people are getting as much as they can in the face of gas competition?

A Again I would like to ask an expert on this. I am only presenting the brief.

BY MR. FRAWLEY: Mr. Starky is here; I will take him then.  
Would you come up, Mr. Starky?

J. B. STARKY Sworn. Examined by Mr. Frawley.

Q The big competition in the Edmonton area is gas?

A Correct.

Q Do you think you are getting as much for your coal as you can in the face of that competition?

A There are outlying districts that the gas doesn't supply that we could chisel out a little more money.

Q And those people are getting a bit of a benefit?

A That's right.

Q What percentage of your sales would that represent, this fringe?

A About three-quarters.

Q So as to 75 per cent of your ---

A That is domestic coal we are talking about now.



Q Yes. As to 75 per cent you think you could be getting a little more if it wasn't for the ceiling?

A That's right.

Q Let us assume that the ceiling will go, like other wartime controls. You wouldn't need any subsidy?

BY COMMISSIONER McLAURIN: If the ceiling goes the floor goes too. The subsidy is the floor.

BY MR. FRAWLEY: Would you be content to have the subsidy go with the ceiling?

A Well, there would be no mines operating.

Q You are operating now purely because of the subsidy?

A That's right.

Q The ceiling you don't like, you think you could be getting a little more, but if the subsidy went you would just fold up?

A That's right.

Q Other coal would come in then, do you think?

A I think other coal would come in to the customers that couldn't possibly connect up with the gas.

Q What would be the most likely supply that would come in?

A I think Drumheller and some strip mine coal.

Q You would have to sit by and see that because your costs would not permit you to operate?

A That's right.

Q Why are you so much higher than Drumheller?

A Our wages were increased in proportion much more than Drumheller, and our mining conditions are such that they don't lend themselves to mechanization as much as Drumheller.

Q You are not as fully mechanized as the average Drumheller mine?

A Not by far.

BY COMMISSIONER McLAURIN: You say seriously to this Commission that if and when this wartime subsidy is taken away, which I suggest is part and parcel of the ceiling, if that is





taken away the mines would have to fold up?

A That's right.

Q Now if the ceiling is taken away as part of the federal price control system you would not expect the subsidy then to be a federal subsidy? Wouldn't that have to be a provincial government subsidy?

A Well, it was the federal government that raised our wages, made it impossible for us to operate.

BY MR. FRAWLEY: There may be something in that.

BY COMMISSIONER McLAURIN: They raised the wages in Drumheller too?

A Not the same proportion.

Q \$1.77 a day?

A And ours \$2.77. And with regard to subsidy, the last notice we received from the Emergency Coal Production Board was retroactive, a notice that we have been taken off subsidy, so that is how much stabilization there is in any of the subsidy we now receive.

BY MR. FRAWLEY: I don't see any reason why you should be shy about making this submission at all but you do realize that in most parts of Canada the chief worry is to continue the subvention to get into distant markets?

A That's right.

Q You have no aspirations about distant markets here?

A Well, the point is this, that if Drumheller is given an eastern market their production will naturally increase. If their production increases their cost decreases and they will further assimilate the customers and trade we have, so it may be just as well to let our field drop out of the picture.

BY THE CHAIRMAN: Is there no hope of the Edmonton operators getting into the Ontario market?

A We supplied coal to Toronto with very good results but of course the subvention failed.

Q Why do you speak about Drumheller having a chance to get



into the Ontario market?

A I am afraid that Mr. Stansfield, the plant that he operated in Saskatchewan and the one he operates grading our coal will prevent us from shipping.

Q Your coal you don't think will stand up? The Drumheller coal is a better grade of coal for the Ontario market than yours is?

A That's right.

MR. HYNDMAN: I think we say that in the brief.

BY COMMISSIONER MORRISON: "Slightly". In the brief you say it is "slightly high".

MR. HYNDMAN: On page 6.

BY MR. FRAWLEY: Do you think if price control was removed and you could fix your own prices, do you think you could arrive at a price that would allow you to gain some of this market, or natural gas would just put you out of business?

MR. STARKY: Sure.

Q Of course you would have this fringe?

A That is too small to operate successfully.

Q You couldn't hope to operate just to supply these areas of the cities that are not yet tied up with the gas system?

A That's right. You can tell by our figures. I think our output has dropped 50%, from 600,000 to 300,000.

MR. HYNDMAN: I don't know that that is shown on the copy of the brief you have but it is handed in as an extra page.

MR. STARKY: It will possibly drop another 150,000 this year.

BY THE CHAIRMAN: In other words, Do I understand subventions on coal into Ontario don't help you people very much?

A Well, they barred our coal from going in.

Q I am not talking about wartime.

A Oh, I shipped about 200 cars to Northern Ontario in 1924, maybe '22 or '23, and they all were willing to buy more coal.

Q That was before subventions?





A Well, that was when this first subvention, about \$8 a ton, went on.

BY COMMISSIONER McLAURIN: That was that trial shipment?

A Yes.

BY THE CHAIRMAN: Subventions came in in 1932 or a little before that.

A We have never shipped any to Ontario on that, or very little.

Q Why?

A We were barred by the ----

Q Oh no, you were not barred.

A The coal couldn't enter under that subvention.

BY COMMISSIONER MORRISON: You were barred under the classification of coal?

A Yes.

BY MR. FRAWLEY: Did the actual terms of the subvention order prohibit you?

A Yes.

Q It really barred you by its terms?

A Yes, that's right.

Q And that is because, you think, of the quality of your coal?

A Yes sir.

BY THE CHAIRMAN: Any preparation you could do to get your coal in?

A Our coal and the Drumheller operators is prepared exactly the same.

BY COMMISSIONER McLAURIN: The preparation, Mr. Chairman, I think would be to squeeze the moisture out.

MR. STARKY: Or out of the stock.



BY GERALD O'CONNOR - I have here a brief from the Edmonton Chamber of Commerce, of which James Walker is President, and Mr. Rose, Secretary. The brief was prepared by Mr. W. J. Dick and he will present it.

The brief has been presented to the members of the Council Chapter and gone over paragraph by paragraph; and we believe that this brief has the approval of the 900 members of the Association.

Exhibit No. 141 - Submission of Edmonton Chamber of Commerce.

MR. W. J. DICK then reads Exhibit 141, as follows:-

GENERAL BRIEF ON BEHALF OF A NATIONAL  
FUEL POLICY FOR CANADA.

During the first Great War Canada began to realize its dependence on supplies of fuel from the United States. The tempo of war speeds up industry and as coal forms the basis of practically all industrial production, it was only natural for the United States to conserve supplies of coal for its own war effort.

The Canadian Society of Civil Engineers (since incorporated as the Engineering Institute of Canada) at its annual meeting held in Toronto in 1918, formed a committee to study what was called the Acute Fuel Area in Canada, this area embraced Ontario and Quebec. Early in the first Great War, a Dominion Fuel Controller was appointed and everything was done to increase production of coal from Canadian mines and to distribute United States coal on a quota basis where same was absolutely necessary, and to encourage the cutting and use of cord wood for fuel wherever possible as a substitute for coal. The permanent effects of this policy insofar as Alberta coal is concerned will be discussed later. Since 1918 many persons have advocated a National Fuel Policy for Canada and the Hon. R. B. Bennett, upon becoming Prime Minister for Canada in 1928, promised that this would be done."

BY COMMISSIONER MORRISON - A correction there Mr. Dick. My memory is not very good, but my recollection is that Mr. Bennett did not become Prime Minister in 1928.



BY THE CHAIRMAN - He may have promised this before the election.

A. quite possible.

MR. DICK (continues brief)

Mr. W. J. Dick, Mining Engineer, presented a paper to the Annual Meeting of the Canadian Institute of Mining and Metallurgy, held in Ottawa in March 1936 on "Alberta Coal Problems" and advocated a National Fuel Policy.

The Canadian Chamber of Commerce has repeatedly advocated a National Fuel Policy for Canada, as follows:

NATIONAL COAL POLICY - Annual Meeting, Winnipeg, Man. - 1925

RESOLVED that in the opinion of this Conference a National Coal Policy for Canada should be formulated and every effort made by the Government of Canada to develop the coal industry and establish the use of Canadian coals in Canada's markets, so making it unnecessary to import coal and coke from other countries.

COAL SITUATION - Annual Meeting, Saint John, 1926.

WHEREAS Canada has mineral deposits of coal suitable for domestic and commercial use:

AND WHEREAS considerable progress has been made in the development of the coking industry in Canada:

THEREFORE BE IT RESOLVED that in the opinion of the Canadian Board of Trade, a National Coal policy for Canada should be formulated, and every effort made by the Government of Canada to develop the coal and coke industries and establish the use of Canadian coals in Canadian markets.

CANADIAN COAL FOR CANADIAN PEOPLE - Annual Meeting, Vancouver, 1927.

RESOLVED that the Canadian Chamber of Commerce commends the Government of Canada for its past endeavors to promote the utilization of Canadian coal in Canada, and urges that the Government continue its efforts towards this desirable national objective;

AND IT FURTHER recommends that to facilitate the more general use of Canadian coal in Central Canada, the decision of the Board of Railway Commissioners in the Western Coal rates hearing be made public at as early a date as possible, and that the decisions of Parliament respecting the Duncan Report on Coal be also made effective.





NATIONAL FUEL POLICY - Annual Meeting, Toronto, 1940.

The Dominion Government should use every endeavour to continue its development of a National Fuel Policy..

Since 1918, Nova Scotia and British Columbia have repeatedly made similar representations for assistance to coal mining in their province.

From the above it is evident that for the last twenty-five years all coal producing provinces have been pressing for a National Fuel Policy. Some assistance has been given to the industry in the manner of subvention, but these have been so variable and without a fixed long-range policy, so were of little use insofar as permanency is concerned.

The fact remains that, during the last thirty-five years, of the total consumption of coal in Canada the percentage of Canadian coal used has gone down instead of up.

That the problem of a National Fuel Policy for Canada is a difficult one to solve no one can gain-say, and it cannot be solved on an economic basis per se, if one accepts the ordinary meaning of the term.

However, the whole economic structure of Canada as a nation would break down if we applied the same meaning to the word. For example, the basis of the customs tariff is to grant to the producer a subsidy in order that users of his products in Canada may not purchase these products elsewhere at a lesser price.

A National Fuel Policy that would exclude the purchase of other than coal mined in Canada is not deemed possible except at a very great national cost. Nevertheless the present war has shown the people of Canada that the ability of Canada to shoulder a budget six to ten times a peace-time one is quite feasible.

It is therefore evident that our taxable capacity is such that we should expect a greater measure of Government assistance in the future than has been the case in the past. Notwithstanding our high taxation, general overall money income after taxation, remains at high levels.



In this connection, even if a measure of a National Coal Policy could be established, there is no single industry that has a greater potential capacity to employ labor than coal mining. For example, our purchases of other than coal mined in Canada amount, in normal times, to about \$60,000,000. This would provide for the employment of at least 35,000 men at the mines alone, to say nothing of the extra labour that would be employed to manufacture machinery and supplies for the mines and the labour to transport the coal to the market.

People in Canada have become metal mining conscious, but not coal mining conscious.

This is only natural because people in Ontario and Quebec where the large centre of population exists, and also our legislators, realize day by day the immense value of metal mining to their standard of living. During the last depression the great metal mining industry of Canada contributed more than any other industry to the employment of labour and thereby lessened the effects of the depression. Also the Dominion Government assisted greatly in this development by rebating a portion of the income tax on dividends from metal mines; no such assistance was granted to coal mines.

As a national Fuel Policy would necessitate assistance from the Dominion Government involving many millions of dollars annually, it would be natural for Ontario and Quebec who provide most of the revenue to the Dominion Government to be adverse to this cost which they eventually pay.

A careful analysis of this question will show that this is false reasoning and that Ontario and Quebec would benefit from such a policy. Were it not for the fact that manufacturing is concentrated in these provinces their argument would be sound; also, were it not for manufacturing in these provinces there would not be the concentration of wealth in these provinces and therefore they would not be paying a large portion of the costs.

The immense purchasing power of the West, through the sale of its farm products and coal, eventually finds its way into the pockets of the manufacturer or supplier in Ontario and Quebec.





Similarly, increased coal production would benefit these provinces.

#### IMPORTANCE OF COAL MINING

In a paper presented to the annual meeting of the Canadian Institute of Mining and Metallurgy, March 1936, (Coal Problems of Alberta, by W. J. Dick) it is stated, "Too many public men and men in authority are unaware of the value of coal mining".

Great stress has been laid on the value of gold mining in its relation to the employment of labor and consequent lessening of the effects of the depression in Canada. It may come as a surprise to you to learn that coal mining industry of Alberta:

- (a) Gives employment to three-quarters as many men as does the gold mining industry of Ontario.
- (b) Pays more money to labor in and incident to the industry than the total wages and salaries paid in and incident to the gold mining industry of Ontario.

Let us see on what premises the above statements are made. The data in Tables 1 and 2 was obtained from the Dominion Bureau of Statistics.

Table 1 - Employment Data, Gold Mining Industry of Ontario

	<u>1932</u>	<u>1933</u>	<u>1934</u>
No. of men employed	8,852	9,524	11,627
Salaries and wages paid	\$15,141,023	\$15,907,542	\$18,918,830

Table No. 2 - Employment data, Coal Mining Industry of Alberta

	<u>1932</u>	<u>1933</u>	<u>1934</u>
No. of men employed	8,424	8,548	8,393
Salaries and wages paid	\$8,767,751	\$8,049,744	\$8,069,405

A consideration of this relationship of labor costs to the value of production will show that Table 2 tells only a portion of the story of the amount of wages and salaries paid to labor incident to coal mining, whereas Table 1 tells almost the whole story insofar as gold mining is concerned.

Where an ounce of gold is recovered in Ontario, it has a present value of \$35.00 per ounce. This gold is shipped to the mint, or market, at an almost negligible cost.



On the other hand, thirty-five dollars represents, on the average,  $13\frac{1}{2}$  tons of coal. The average railway haul to market is about 500 miles, and labor is expended in transporting this coal on railways and in delivery from railway sidings to the basement of the consumer. It is estimated that these labor costs amount to over \$1.30 per ton, not including salaries, overhead, etc. The production of coal in Alberta amounted to over seven million tons per annum prior to 1930, but, due to the depression, this has fallen to an average of 4,800,000 tons in 1932, 1933 and 1934. Therefore, in the marketing of this coal, there was paid in wages some \$6,280,000.

Table 3 shows the amount of money paid in wages and salaries (in most part) in, and incident to, coal mining in Alberta for the years 1932 to 1934 inclusive.

TABLE 3

	<u>1932</u>	<u>1933</u>	<u>1934</u>
Salaries and Wages at mines	\$8,767,751	\$8,049,744	\$8,069,405
on railways & delivery	<u>6,331,000</u>	<u>6,133,400</u>	<u>6,180,200</u>
	\$15,098,751	\$14,183,144	\$14,249,605

The figures for Alberta in Table 3 are closely comparable with those of Table 1 for gold mining in Ontario; but even this comparison does not properly present the case for the Alberta coal industry, whereas gold mining has reached an all-time peak. For the year 1929, wages and salaries paid in mining and marketing Alberta's coal production were as follows:

TABLE 4.

Salaries and wages paid at mines,	\$14,605,197
Wages (not including salaries) paid to railway employees and to employees delivering coal	<u>9,295,000</u>
Total.....	<u>\$23,900,197</u>

BY MR. TANNER - In going through we find on Table 4 that the salary and wages paid at mines \$14,605,197, and Wages not including salaries \$9,295,000, or a total of \$23,900,197, and that compares with the gold mining industry which in 1934 paid



\$18,918,830, so it is sufficient to show that the statements made on Tables 1, 2 and 3 are correct.

MR. DICK (continues brief)

The data shown in the above tables completely substantiate the statements italicized on page 573. The comparative figures may be open to attack on the ground that in neither case do they include moneys expended for materials; but the cost of materials (other than capital expenditures) used at coal mines is greater than for gold mining.

It is true statistics would show that, in recent years, more purchases of machinery were made at gold mines than at our coal mines. The reason for this is that large capital expenditures are being made at gold mines on account of the rapid development and extension of this industry. On the other hand, the larger part of capital expenditures for coal mining in Alberta were made many years ago, and today the industry is on the decline, due to economic conditions, instead of progressing.

It might appear from the above that an attack is being made on gold mining. This is far from being the case. We, as coal miners, wish the gold mining industry every success. But our plea is for a better understanding by the people of Canada of the value of coal mining from a National standpoint.

It may not be amiss to point out that the efficiency of coal mining operations in Alberta is of a fairly high order. Notwithstanding the hazards of explosive gas, mine fires, etc., that are not so incidental to gold mining, the actual costs of operation compare very favorably with those of gold mining. To illustrate:

The lowest-value gold ore mined in Ontario today is approximately one-tenth of an ounce troy, or \$3.50 a ton.

The average selling price of coal at mines in Alberta is \$2.62 per ton, or the equivalent of less than one-thirteenth of an ounce troy of gold.

A comparison on a volume basis would show that the average coal mine in Alberta is mining coal equivalent in value to a gold ore containing about one-fortieth of an ounce troy per ton."





As the main argument in the presentation of this brief is based on compensation to the coal industry of Alberta, to partially off-set the disability suffered under the tariff, it is necessary to discuss at some length the disability suffered by Alberta as well as certain other provinces under the tariff.

The tariff duty is a tax and a subsidy. It is a subsidy in the same sense in which a bounty is a subsidy. The only material difference is that a bounty is a fixed sum, whereas a tariff subsidy is an uncertain sum. In the case of the bounty, moreover, the amount of the subsidy is collected by the Government, from the taxpayers, and is then paid over directly to a subsidized industry, whereas in the case of the tariff subsidy the Government merely fixes the rate of duty, and the subsidy is paid by the consumers of the commodity which is protected.

The truth of this statement is very evident in some industries. The automobile industry will serve as an example. This industry is located in Ontario and receives tariff protection of  $17\frac{1}{2}\%$  under the general tariff. Presumably it would not exist without tariff protection. It is subsidized to the extent of its protection. Who pays the subsidy? Clearly it is paid by the consumers of automobiles in Canada. In Alberta in 1940 sales of automobiles and trucks amounted to the sum of \$11,336,768. At the most conservative estimate the purchasers of automobiles in this one year in Alberta paid in the neighborhood of \$1,750,000 in additional price due to the tariff.

Half the total number of trucks and automobiles used in Alberta is used by farmers and farming is the basic industry of Alberta. If Ontario were dependent upon supplies of farm products from Alberta it would not matter what price was paid for the trucks and cars as this cost would be passed on to the consumers of these products. Unfortunately, the greater proportion of Alberta's agricultural products can only be sold in world markets at world prices and the added cost of trucks and cars due to the tariff has to be absorbed by Alberta's basic industry - farming.

In the case of some other protected commodities, the price effects are more obscure, but this does not alter the fact



on final analysis, the effect of the tariff is to permit certain industries to collect subsidies from the consumer in order to allow them to conduct their operations. This view has had confirmation in the Report of the Special Commission on the Australian Tariff in 1927, which declared that "The assistance given to tariff protected industries is in fact a bounty, but it is paid by consumers and much of its cost falls ultimately on the export industries." It is important to observe that tariff protection in Canada confers special benefits upon the central provinces of Ontario and Quebec. It is not denied that these provinces possess certain distinct advantages, but these advantages in many cases, are detrimental to the west."

BY THE CHAIRMAN - Good for the Dominion Exchequer.

A. Yes.

Q. They received that \$10,150,000 that you people paid on tariff?

A. We paid it on the goods that were consumed, to the manufacturer.

BY COMMISSIONER MORRISON - Not on the automobile?

A. Well the manufacturer in Canada. These were automobiles manufactured in Ontario.

MR. DICK (continues brief)

To quote from the Canada Year Book 1943-44, page 408:

"Ontario and Quebec are by far the most important manufacturing provinces of Canada. Their combined production in 1941 amounted to \$4,963,000,000 or over 81% of the gross value of manufactured products of the Dominion. The proximity of Ontario to the coal fields of Pennsylvania, the water-power and other varied resources of the two provinces, and their nearness to the larger markets of Canada and the United States have all contributed to the above result."

From the above it is apparent that although Alberta must purchase goods manufactured in Ontario, which are protected by the tariff, the coal used in the manufacture of these goods is purchased from the United States. This is a one-sided policy and is distinctly unfair to other coal producing provinces within the





Dominion and contrary to the motives and purposes of the National Policy.

When the National Policy was brought down in the Dominion Budget of 1879, it was made abundantly clear that it was designed, as it's name implies, to confer benefits upon the varied interests of the entire Dominion. The government of the day denied in the strongest terms that it was intended to confer special advantages upon any one section of the country. On the contrary, it was calculated to strengthen, revive and create industries in all provinces of the Dominion thereby establishing a larger home market for agricultural products in each or all provinces (See House of Commons Debates 1879).

Alberta became a province in 1905 and has carried on under this protective policy. The economic interests of this province has seriously been effected thereby.

So long as Alberta, in common with Saskatchewan and Manitoba were able to sell their products of agriculture in World's market at such a price as to leave a fair margin of profit to the farmer, no great hardship was felt due to the effect of the National Policy which caused these provinces to pay high prices for their agriculture machinery, motor cars, trucks and supplies.

However, since 1929, excepting the war period, the low prices secured in world's markets for these products caused an enormous drop in the value of the products of agriculture.

An axiom of international trade is that a country's ability to buy depends on what it sells.

As Canada cannot consume more than a small percentage of the products produced in the Prairie Provinces it is evident that the National Policy not only does not provide within Canada a market for our agricultural products but at the same time restricts our world's market by restricting our purchases from other countries.

In 1938 Canada's export trade with the United States amounted to 270.5 million dollars and imports 424.8 million dollars, leaving an adverse trade balance of 154.3 million dollars.



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W. J. Dick

In 1938 Exports to United Kingdom,	339.7 million dollars
Imports from " "	119.3 " "
Leaving a favorable trade balance of	220.4 " "

We have a favorable trade balance with Great Britain but this cannot continue after the war nor is it as large as it would be if we purchased more manufactured goods from Great Britain.

Great Britain imports large amounts of the products of agriculture from Russia, Argentine and Australia because she sells to them.

The National Policy was introduced by Sir Leonard Tilley, of New Brunswick, then Finance Minister of the third administration of Sir John Macdonald. In bringing down the budget, Sir Leonard Tilley made the following statement:

"The time has arrived I think when it will become our duty to decide whether the thousands of men throughout the length and breadth of this country who are unemployed, shall seek employment in another country, or shall find it in this Dominion; the time has arrived when we are to decide whether we will be simple agriculturists raising wheat, and lumbermen producing more lumber than we can use or Great Britain and the United States will take from us at remunerative prices; whether we will confine our attention to the fisheries and certain other small industries, and cease to be what we have been, and not rise to be what I believe we are designed to be under wise and judicious legislation, or whether we will inaugurate a policy that will, in its provisions, say to the industries of the country, we will give you sufficient protection; we will give you a market for what you can produce; we will say that, while our neighbors build up a Chinese wall, we will impose a reasonable duty on their products coming into this country; at all events, we will maintain for our agricultural and other productions largely, the market of our own Dominion." (House of Commons Debates, 1879, page 429).

Referring particularly to the intended effect of the National Policy on the interests of the Maritime Provinces,





Sir Leonard Tilley made the following comments:

"As far as the agricultural interests of the Lower Provinces are concerned, they will be benefitted by getting an increased home market for their productions, and increased prices for some of their articles....Something was said the other night with reference to our manufacturers in the different parts of the Dominion. I am not, I think, over-sanguine when I say the day is not far distant when the population of the western country will be greater than it is in Canada, and when the Maritime Provinces, with their coal, iron and water-power, will be manufacturing centres for this vast Dominion .... It is my conviction, in reference to the Province of New Brunswick, that the manufacturing equally with the agricultural and lumber interests, will be fostered and encouraged by the present tariff." (House of Commons Debates, 1879, pp. 1306-1308).

Sir Leonard Tilley, denying that the National Policy would be a sectional policy, declared in the strongest terms that it was designed to benefit all parts of the Dominion:

"We are told that this is a sectional policy, that it is going to separate the people, that the Government or the Finance Minister was simply a Committee appointed to receive propositions from the men who came to Ottawa. I can only say that, if we accepted the propositions from all parts of the Dominion, the tariff would have been a very queer mixture indeed, because we naturally had conflicting interests to deal with. But the Government in view of its responsibilities, as representing Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and the North West, had to consider and decide as to what was in the interest of the whole Dominion, and what might meet, fairly and justly, the interest of the whole country. If we had come down with a proposition directly in the interest of one province, no matter how great it might be, had we taken propositions en bloc from Ontario for example, the other Provinces would have grounds for complaint. Our scheme is not for a section, but for the interest of the whole country. (House of Commons Debates, 1879, pp. 719-720).





And Sir Charles Tupper, speaking particularly of the interest of Nova Scotia in the National Policy, made reference to the enlarged market for Nova Scotia coal in the Province of Ontario which would follow the adoption of the Protective Policy:

"I believe, in the interests of Ontario, it is a wise policy to develop the coal industry of Nova Scotia. That Province is one important part of the Dominion, and twelve million dollars of capital invested in coal mines cannot lie dead and unremunerative without inflicting great injury on the whole country. Nova Scotia has common interest with the other Provinces and contributes to the general revenue, and it is, therefore, the duty of Parliament to adopt all legitimate measures to promote and foster its industries. What would be the effect of pursuing a contrary course? In the present state of the labour market in the United States, coal can be produced at exceedingly low prices and if the Nova Scotia coal industries are not fostered they will be crushed out, and the people so employed will go to swell the ranks of those engaged in building up that great country to the south of the line." (House of Commons Debates, 1879, pp. 464-465).

These statements from the authors of the National Policy will suffice to indicate that the adoption of an outright Protective Tariff in Canada was predicated on the belief that any benefits through stimulus to manufacturing and enlargement of home markets for agricultural products would be distributed fairly among the several provinces of the Dominion. With this purpose it was introduced; upon this understanding it was adopted by Parliament.

At that time of course the Province of Alberta did not exist but what was said about the policy to develop the coal industry of Nova Scotia applies with equal force to Alberta as well as other coal producing provinces today.

As stated previously, the gross value of manufactured products in 1941 in Ontario and Quebec amounted to \$4,963,000,000 with 795,821 employees. For the same period manufactured products in Alberta amounted to \$142,651,493, with 16,761 employees. (P. 410 The Canada Year Book 1943-44).



For the same year the population of Ontario and Quebec is given as 6,119,537 and Alberta as 796,168. That is to say, Alberta with 13 per cent of the population of Ontario and Quebec produced less than 3 percent of the value of manufactured goods produced in Ontario and Quebec.

The leading industries of Alberta, other than coal mining, are those based on its agricultural resources - grain growing, cattle raising and dairying. The production of Petroleum in Alberta has given rise to a development of the oil refining industry; the lumbering industry also is an important one.

The only major industry of Alberta capable of great expansion is that of coal mining.

In connection with the establishment of a National Fuel Policy which requires Government assistance in the way of special freight rates or subventions on coal produced in the several provinces it is necessary to study the effect of the tariff policy of the Dominion upon the economic interests of all provinces in Canada. It is also necessary by implication to study the gains received and losses suffered by the several provinces of the Dominion under the protective system in order to determine the amount of assistance any coal producing province is entitled to in connection with the establishment of a National Fuel Policy and in this way tend to offset any disadvantage now suffered by such provinces under the present Dominion Protective System.

Up to 1931 no attempt has been made to measure either the net effect of the protective tariff upon any one of the provinces of the Dominion of Canada or the relative incidence of the tariff upon the various provinces which comprise the federation. In other words, although the National Policy of 1879 has been in operation for some 55 years, no scientific study of its provincial incidence has ever been attempted.

One reason, no doubt, for this was that due to the rapid expansion of the newer provinces and their inherent wealth, the inequalities existing were not so apparent.





The inequalities only become apparent when they constitute a real burden.

Insofar as Alberta is concerned, the protective policy constitutes a real burden and therefore in the way of securing some compensating advantage adequate assistance in some form or other is asked in order to secure a substantial portion of the market for coal in Ontario.

The only scientific study of the provincial incidence of the tariff is that contained in a brief - "A Submission on Dominion-Provincial Relations and the Fiscal Disabilities of Nova Scotia within the Canadian Federation", presented by Norman McL. Rogers on behalf of the Nova Scotia Government, 1932. This analysis is for the year 1931, but eliminating the war years since 1939, there would be little difference in the relative incidence in the later years. Quoting extensively from this report:

SUGGESTED TECHNIQUE FOR MEASURING THE PROVINCIAL  
INCIDENCE OF THE CANADIAN PROTECTIVE TARIFF.

"In developing a technique or procedure through which to measure the effects of the Canadian tariff upon the economic interests and financial position of the provinces, it is important to recognize at the outset that a lack of complete statistical data will make it impossible to obtain more than a rough measurement even of the direct effects of the tariff. As already stated, the Terms of Reference issued to this Commission only permit of an investigation of the results of the tariff on the province of Nova Scotia, though by implication an investigation is also called for of the relative effects of the Canadian tariff upon this and other provinces of the Dominion. Since we are not entitled to consider the effects of the protective tariff on the national economy, we are forced, as it were, to take the tariff as it stands and to consider its incidence upon the various provinces. This will permit a conclusion as to the net result of the protective tariff upon the economy of Nova Scotia. It will also permit conclusions as to the provincial distribution of the gains and losses implied in



a system of protection.

Historically, the imposition of tariff duties has served two purposes; Sometimes such duties have been imposed primarily as a means of securing revenue; they have also been imposed, however, as a means of encouraging the development of domestic industries. In such cases the duties are placed at such a level as to exclude, with reasonable effectiveness, the importation of the protected commodities from foreign countries. The distinction between a tariff for revenue and a tariff for protection is well known. It is not always easy, however, to distinguish a revenue duty from a protective duty. It may be said that in most tariffs there is a combination of the two kinds of duties in order to achieve the dual objectives of revenue and protection.

In seeking to analyze the incidence of the cost of the tariff of Nova Scotia, and other provinces of the Dominion, it is important at the outset to determine whether tariff duties on imports actually paid in at customs houses are to be included among the costs of the tariff. Opinions may differ upon this point, but in the analysis which follows we have been influenced by the conclusion reached by the Committee of Economic Inquiry on the Australian Tariff, 1929, which was to the effect that "The amount paid in duty on imports of protected commodities is not to be reckoned crudely as a cost of protection, as it is required for Government expenses, though the method of taxation is open to criticism." If the duties actually collected on imports are excluded from the analysis, it is quite evident that the monetary costs of protection are to be regarded as the excess prices which consumers in the various provinces presumably pay for domestic products because of tariff duties levied on imports of similar commodities. In the same manner, if we seek to estimate in monetary terms the advantages of the protective tariff to producers, we must calculate the amount received by producers in the respective provinces in excess prices presumably charged on goods for which they are afforded protection against foreign imports.





In estimating the effect of the Canadian tariff on Nova Scotia, it is necessary, therefore, to consider this community in its producing and consuming aspects. A protective tariff is designed, principally, to assist producers. In the attainment of this object, consumers are penalized to the extent that protection given to producers results in higher prices for the commodities protected than would be paid otherwise for the same commodities if imported from abroad. In considering the net effect of the Canadian tariff on Nova Scotia, it is necessary to estimate:

1. The total loss to consumers in Nova Scotia because of the enhanced prices they are presumably compelled to pay for the protected commodities they purchase from year to year.
2. The total monetary gain to protected manufacturers in Nova Scotia through the enhanced prices they presumably receive from year to year because of the protective tariff.

When these totals have been estimated, the difference between them will represent a rough measure in monetary terms of the direct gain received, or loss suffered by the community, under the protective tariff."

It should be noted that this analysis does not assume to contract the economic position of Nova Scotia under the alternative policies of protection and free trade. Rather it presumes the existence of the protective system in the Dominion and seeks to discover its net effect from year to year on the economy of Nova Scotia as a province operating within the fiscal structure of the Dominion. It will assist in determining whether Nova Scotia is bearing a disproportionate burden of the cost of the protective system to the Dominion as a whole.

AN ESTIMATE OF THE PROVINCIAL DISTRIBUTION OF TARIFF SUBSIDIES  
AND TARIFF COSTS.

It has been indicated that in addition to its effects in increasing or decreasing the national income the tariff operates internally as an instrument by which the distribution of that income among individuals and among sections of the country is modified or biased. The economic effects of the tariff are often obscure and only lend themselves to analysis in very general terms. The internal monetary effects of this are





very general terms. The internal monetary effects of this are expressed more easily in concrete terms. In a federation the analysis of such effects is of particular significance inasmuch as the provinces are distinct entities and the provincial incidence of the tariff may throw light on the relative taxable capacity of the several provinces as well as indicating the immediate monetary effects of the tariff on the income of individual provinces.

The task of making this computation presents a number of difficulties which ought to be mentioned at the outset in order to suggest such qualifications as may be necessary. It must be recognized that an exact calculation of the gains and losses under the protective tariff is rendered impossible by the lack of statistical detail. Any exact measurement, for example, of the enhanced prices paid by consumers in any one province, as a result of the protective tariff, would require accurate and detailed information as to the consumption of a wide classification of manufactured goods in that province. It would also require accurate and detailed information respecting the prices at which these goods were sold to consumers in that particular province, as compared with the prices at which they could be imported if the protective duties were removed. Such information, in the detail indicated, does not now exist either in the Bureau of Statistics or in any Department of the Dominion Government.

But the impossibility of obtaining an exact measurement of the incidence of the tariff upon the several provinces is no reason why an attempt should not be made to secure an approximate result within the range of existing statistical knowledge. The conclusions reached by an analysis of this kind are of less importance in relation to exact monetary effects than as indicating the proportionate burden of the tariff upon the several provinces of the Dominion. For the latter purpose it is submitted that the analysis which follows will throw considerable light upon this aspect of the effects of the tariff upon the various provinces of the Dominion.



PROVINCIAL DISTRIBUTION OF TARIFF SUBSIDIES

The procedure adopted to determine the provincial distribution of tariff subsidies is as follows:

1. The first figure to be obtained is one which represents the total gross value of goods manufactured in Canada in a given year (1931) which are also consumed in Canada. This figure is obtained by taking the gross value of goods manufactured in Canada in 1931, viz: \$2,698,461,862. and subtracting from it the gross value of the exports of manufactured goods, viz: \$350,166,608. The figure thus obtained is \$2,348,295,254.

2. The total obtained from the above calculation represents the gross value of goods of Canadian manufacture consumed in Canada in 1931. This total, however, includes certain classes of manufactured goods which are not subject to tariff duties, viz: printing and publishing, dyeing and cleaning, sawmills, bread and other baking products, central electrical stations. The gross value of these classes of manufactured goods consumed in Canada in 1931 was \$286,508,213. This amount must be deducted from the first total in order to obtain the gross value of protected goods manufactured and consumed in Canada. The figure thus obtained is \$2,061,787,041.

3. The above total represents the gross value of protected goods manufactured and consumed in Canada in 1931. It includes therefore the price increase due to the operation of the protective tariff. The best available measure of the price increase due to the tariff is the average advalorem duty on all dutiable imports into Canada. This average as calculated by the Dominion Bureau of Statistics for 1931 is 26%. On this basis the total given above, viz: \$2,061,787,041. is 126% of the total gross value of protected goods manufactured and consumed in Canada in 1931 valued at competitive world prices.. In order to obtain a figure which can be used legitimately as a base for the computation of the enhancement of prices due to the tariff it is necessary therefore to take 100/126 of the total given above. This calculation gives a figure of \$1,636,338,921 representing the gross value of protected goods manufactured and consumed in





Canada in terms of competitive world prices, i.e. the prices at which similar imports could be purchased free of duty.

4. It is necessary to determine the total amount of the tariff subsidy on the gross value of protected goods manufactured and consumed in Canada. As previously stated, since it is impossible to obtain exact information upon individual items with the existing statistical information, it seems reasonable to adopt as a measurement of the enhancement of prices due to the tariff a figure which represents the average ad valorem duty on all dutiable imports into Canada in 1931, viz: 26%. When this percentage is applied to the last total in the preceding section, the result will represent the total tariff subsidies in the form of enhancement of prices of protected goods manufactured and consumed in Canada, this enhancement of prices being the result of the protection afforded to Dominion manufacturers against foreign imports of similar commodities. The figure obtained by this calculation is \$425,448,119.

5. The next step is to determine how this last total of tariff subsidies to manufacturing industries in the Dominion as a whole is distributed among the various provinces. It would appear that the most reasonable method of determining the distribution of this tariff subsidy among the provinces would be to divide it among them on the basis of the proportionate amount of salaries and wages paid out in the respective provinces by the protected industries. This method of division, it may be noted, was recognized and adopted by the Special Committee of Economic Inquiry on the Australian Tariff in 1929. On this basis adopted, the provincial distribution of tariff subsidies is as follows:



Province	Percentage of Distribution	Estimated Tariff Subsidies to Protected Manufacturers
	%	\$
Prince Edward Island	.11	467,992
Nova Scotia	2.23	9,487,493
New Brunswick	1.91	8,126,059
Quebec	31.23	132,867,447
Ontario	58.88	220,722,484
Manitoba	4.68	19,910,971
Saskatchewan	.77	3,275,950
Alberta	1.93	8,211,148
British Columbia	5.26	22,378,571

6. In order to indicate more clearly the comparative position of the several provinces in relation to tariff subsidies, it is desirable to place these subsidies on a per capita basis. The final result will represent the provincial distribution of tariff subsidies on a per capita basis as follows:

Province	Total Tariff Subsidy	Population	Tariff Subsidy per capita
	\$		\$
Prince Edward Island	467,992	88,038	5.32
Nova Scotia	9,487,493	512,846	18.50
New Brunswick	8,126,059	408,219	19.91
Quebec	132,867,447	2,874,255	46.23
Ontario	220,722,484	3,431,683	64.32
Manitoba	19,910,971	700,139	28.44
Saskatchewan	3,275,950	921,785	3.55
Alberta	8,211,148	731,605	11.22
British Columbia & Yukon	22,378,571	698,492	32.03

#### Provincial Distribution of Tariff Costs

The procedure adopted to determine the provincial distribution of the costs of the Canadian Tariff is as follows:-



1. In determining the Provincial distribution of the costs of the Canadian Tariff, the initial figure to be used is that obtained in item "2" of the previous computation; namely, the gross value of protected goods manufactured and consumed in Canada in 1931 - \$2,061,787,041.

2. It is necessary to determine the provincial consumption of protected goods manufactured and consumed in Canada. One possible basis upon which to measure the provincial consumption of goods is that of comparative population. This would be unreliable, however, because of the different habits and rates of consumption prevailing in the several provinces. The most accurate index of the varying rates of provincial consumption is afforded by the statistics of retail sales in Canada and its provinces as published by the Dominion Bureau of Statistics. On the basis of these figures the rates of provincial consumption in the various provinces are as follows:

Prince Edward Island	.48%
Nova Scotia	3.71%
New Brunswick	3.03%
Quebec	23.78%
Ontario	39.66%
Manitoba	6.86%
Saskatchewan	6.87%
Alberta	6.56%
British Columbia	8.87%
Yukon & Northwest Territories	.11%

3. The next step in the calculation is to apply these percentages representing provincial rates of consumption, to the total figure representing the gross value of protected goods manufactured and consumed in Canada, viz: \$2,061,787,041. The results thus obtained indicate the consumption of protected goods of Canadian manufacture in the various provinces.





Prince Edward Island	\$ 9,898,577
Nova Scotia	76,492,299
New Brunswick	62,472,147
Quebec	490,292,958
Ontario	817,704,740
Manitoba	141,438,591
Saskatchewan	141,644,769
Alberta	135,253,229
British Columbia	182,880,510

4. In order to obtain the figures representing the cost of the tariff in each province in terms of enhancement of prices due to protection the same procedure is followed as in items "3" and "4" of the preceding computation. When the comparative world prices are computed and the average ad valorem duty of 26% in 1931 is applied to the results thus obtained the following tabulation sets out the provincial distribution of the cost of the tariff in terms of enhancement of prices to the consumers in the various provinces:

<u>Province</u>	<u>Enhancement of Prices due to tariff</u>
P. E. Island	\$ 2,042,150
Nova Scotia	15,784,124
New Brunswick	12,891,077
Quebec	101,171,562
Ontario	168,732,723
Manitoba	29,185,740
Saskatchewan	29,228,285
Alberta	27,909,396
British Columbia	37,737,247

5. In order to indicate more clearly the comparative position of the several provinces in relation to tariff costs, it is desirable to place such costs on a per capita basis. The following table gives the computation of the per capita distribution of tariff costs by provinces for the year 1931.



Province	Enhancement of Prices	Per Capita Tariff Costs
P. E. Island	\$ 2,042,140	\$23.20
Nova Scotia	15,784,124	30.78
New Brunswick	12,891,077	31.58
Quebec	101,171,562	35.20
Ontario	168,732,723	49.17
Manitoba	29,185,740	41.69
Saskatchewan	29,228,285	31.71
Alberta	27,909,396	38.15
British Columbia	37,737,247	54.36

#### RECAPITULATION

Comparison of Tariff Subsidies and Tariff Costs by Provinces.

The position of the various provinces in relation to gains and losses suffered by the tariff is set out in the following table which gives for each province separately the per capital tariff subsidy and the per capita tariff costs.

Province	Tariff Subsidy per capita	Tariff costs per capita	Net Gain per capita	Net Loss per capita
P. E. Island	\$ 5.32	\$23.20		\$17.88
Nova Scotia	18.50	30.78		12.28
New Brunswick	19.91	31.58		11.67
Quebec	46.23	35.20	11.03	
Ontario	64.32	49.17	15.15	
Manitoba	28.44	41.69		13.25
Saskatchewan	3.55	31.71		28.16
Alberta	11.22	38.15		26.93
British Columbia	32.03	54.36		22.33

#### The Significance of the Comparison

It is desirable to emphasize again that this table representing the provincial distribution of tariff subsidies and tariff costs is chiefly valuable as an indication of a condition. It is not an exact statement of the effects of the tariff upon the incomes of the several provinces of the Dominion. It does not indicate the tendency of the tariff to contract the





income of the export industries. It does emphasize, however, the effect of the tariff upon the internal distribution of the existing national income.

"It is the tendency of the tariff to increase the money incomes of all protected industries. By their potential ability to raise prices to the extent of the duty on imports the protected industries are given command over a larger portion of the income of the community than they would enjoy without such tariff protection. It is equally the tendency of the tariff to raise the internal prices of protected goods and therefore to lower the purchasing power of all money incomes. Owing to the concentration of protected manufactures in Ontario and Quebec these two provinces profit most by the increase in money incomes and are the only provinces where the increase in money incomes is greater than the added charges imposed on all incomes by the effect of the tariff in enhancing the prices of protected goods. In the remaining seven provinces the increase in money incomes due to the tariff is more than offset by the charges on all incomes due to the enhancement of the internal prices of protected goods. In other words, the Canadian tariff has in fact imposed a heavy net charge on the annual incomes of seven of the nine provinces of the Dominion. This net charge on the incomes of these seven provinces goes to swell the money incomes of Ontario and Quebec.

It is also important to note that the per capita net gain attributed to Ontario and Quebec does not imply that the increase in the money incomes of these provinces is evenly distributed as between different classes of producers. The precise distribution of the gain in these provinces is not relevant to the present analysis. Nevertheless the effect of the tariff in the increasing money incomes in Ontario and Quebec is significant because a Federal government presupposes the existence of the provinces as distinct entities, and the ability of the province to discharge its constitutional obligations depends upon the vitality of its economic life. If national



politics have a tendency to enrich the economy of two provinces at the expense of the remainder, this fact is of the utmost importance as determining the wisdom or unwisdom of the policies in question, and also in its bearing upon the constitutional and financial relationships of the Dominion and the Provinces.

It may be contended that the value of the computation of the provincial incidence of the tariff is vitiated by the fact that there is no reason to believe that 26% is an accurate measure of the effect of the tariff in enhancing prices of protected manufactures.. It has already been acknowledged that existing statistical information does not permit an exact calculation of the effect of the tariff on prices. The figure of 26% was taken because it was the flat rate of average ad valorem duties on dutiable imports in 1931. But suppose the measure of average enhancement of prices was 20% instead of 26%. The only difference would be in the absolute amounts and not in the relative distribution between provinces. The relative disparity between Ontario and Quebec as opposed to the other provinces would still remain. It would still be true that Ontario and Quebec would show the only surplus of manufacturers' tariff subsidies over consumers' tariff costs, and that the other provinces would show uniformly a substantial deficit of consumers' tariff costs as compared with manufacturers' tariff subsidies. The difference would be merely one of reducing the figures in all the columns without altering the essential relationships of the two groups of provinces. Moreover, a more detailed analysis of the manufacturing industries in the various provinces would indicate that the favorable effect of the tariff on the incomes of the province would be confined even more exclusively to Ontario and Quebec than the given computation suggests. The most highly protected industries such as textiles, motor cars, iron and steel wares, electrical supplies, boots and shoes, etc. are heavily concentrated in Ontario and Quebec. In other provinces a large proportion of the protected industries





which have been included in this calculation are of a class which receives lower rates of effective protection which are likely to have an effect on prices such as pulp and paper, butter and cheese, fish, canneries, flour and feed mills. Unfortunately, it is impossible without a complete survey of consumption and comparative prices to make such a detailed analysis for all of the provinces."

By segregating the figures of the above analysis which apply to Alberta, it is possible to present a recapitulation which will indicate the effect of the Canadian tariff on manufactured goods upon the income of this province for the given year 1931.

Total tariff costs in terms of enhancement of prices to consumers in Alberta \$27,909,396. Total tariff subsidies in terms of enhanced prices chargeable by manufacturers in Alberta \$8,211,148. Net loss \$18,698,248.

It is apparent from the above that the net loss of \$18,698.248 is an annual charge on the income of the Province. The computation is based on the year 1931 and although the loss has varied from year to year, the conclusion is inescapable that the effect of the tariff upon the income of the province has always been adverse and has existed since the formation of the province in 1905, some 39 years.

#### Coal Subventions

The amount of coal moved and the amount of money paid under Dominion Government subventions on coal for the years 1938 to 1942 inclusive is given in detail in the Provincial Government Brief.

The total number of tons moved to Manitoba and Ontario was 2,531,336 tons at a total cost of \$4,698,489, or an average of 506,207 tons per year at an average subvention cost of \$936,698 per year, or an average subvention of \$1.85 per ton.

From the above it is evident that the assistance granted to coal mining has been very small as compared to the disability of the province under the tariff policy.





A stable and prosperous coal industry in Alberta will be of great benefit to the manufacturer and supplier in Eastern Canada through the increased purchasing power of the Province.

It is therefore respectfully recommended:

1. In areas in Manitoba, Ontario and Quebec, where the price of Canadian coal cannot compete with imported coal, that the Dominion Government pay the necessary subvention or subsidy, either to the railway or coal producer (as the case may be) to take care of the necessary differential in laid-down costs.

2. That such a policy be made effective, without change, for a minimum period of five years.

BY MR. DICK - It has to be a long term policy without change - five years without change.

BY THE CHAIRMAN - If in the interim, say in  $2\frac{1}{2}$  years, if you found you had some way of producing cheaper coal, that you could get your coal into Ontario with a smaller subsidy?

A. We hope that will be the case.

Q. Suppose something of that kind did happen, would you say then that while it was made effective for five years, or ten, that it should be subject to change?

A. All we are recommending is to move Alberta coal, and if we can move it and the subvention is too great, all well and good, but we do not think that would be the case.

Q. We got it at other places that they wanted something substantial. They want Parliament to pass legislation giving \$2.50, or whatever it may be, as a subvention to coal going to Ontario. Suppose in two years time it was found that the coal could be produced cheaper, and only \$1.00 would be necessary as a subvention to get it into Ontario.

A. We cannot see anything that is going to seriously affect the cost of the production of coal.

Q. We might have engineers that would devise ways and means.

A. We hope they will be able to.



BY COMMISSIONER McLAURIN - The best answer might be that Ontario has had it since 1905 and we have been in a jam for a few years.

BY MR. DICK - Our position has always been upward instead of downward.

BY THE CHAIRMAN - Outside of the manufactured goods, the great bulk of the people in Ontario are not getting very much from the tariff.

BY COMMISSIONER MORRISON - And the employees who work at the jobs are getting this benefit.

BY THE CHAIRMAN - Of course the Government of this country also has acted very favorably towards the grain growers.

BY COMMISSIONER MORRISON - Or the consumers of Eastern Canada.

BY THE CHAIRMAN - They don't make any money on grain growing?

BY COMMISSIONER MORRISON - But they get it cheaper.

BY THE CHAIRMAN You spoke of agriculture in this part of the country being in a state of poverty, by the manufacturers of Ontario getting the tariff. Has it not been off-set to some extent by the assistance given to the grain-growers?

A. The only time that has been granted has been during the war period; that is common to all.

BY COMMISSIONER MORRISON - It is not the producer that is getting the assistance on the grain, but the consumers, to keep the price down. The grain producers in Western Canada could sell their grain in the open market at a higher price than under these controls.

BY COMMISSIONER McLAURIN - But the Chairman is saying that Western Canada has received various amounts from the Federal Government, which you have not got in your figures.

BY THE CHAIRMAN - I am not suggesting that I am against it.

BY COMMISSIONER McLAURIN - No, but it is only temporary. It is something given to Western Canada because of the economic position of Canada since 1905. We have had years of producing great wealth in Canada when we were not subsidized at all.





MR. DICK (continues brief)

In order to determine the amount of subvention or subsidy required, it is necessary that a thorough study be made of the quality, grade and laid down price of imported coal used in Canada, as well as the purposes for which the coal is used. A spot map can then be prepared from which a definite zoning program can be outlined and the amount of subsidy or subvention determined as well as the tonnage involved in each zone.

In any area where a lower subvention is required for say, Nova Scotia, or coal mined from any other province, the subvention would be set on the basis of the lowest figure and no special advantage should be given to one province as against another. The sole purpose of the subvention is to establish a national Fuel Policy for Canada. When all of the above information has been secured and plotted it would be quite simple to calculate the cost of an absolute National Fuel Policy. It is evident from the outset that there will be areas in Ontario and Quebec where, on account of their proximity to favorable transportation and nearness to the American border, the subvention or subsidy required would be prohibitive. However, on the other hand, there are many areas where the reverse is the case.

After this information has been secured and compiled, and say the Dominion Government decides to vote \$20,000,000 annually for a minimum period of five years, for the establishment of a measure of a National Fuel Policy for Canada, then it would be possible to enumerate the zones with the subvention applicable in each case so that the maximum tonnage of Canadian coal could be moved with a minimum aggregate cost to the Dominion Government.

It might be argued that the Provinces of Alberta, Saskatchewan and Manitoba are now receiving a subsidy or bonus from the Dominion Government on agricultural products. This is quite true during the war period, but so are the other provinces



receiving a subsidy or bonus through the fixation of prices.

BY MR. DICK - We have been discussing that this morning.

BY THE CHAIRMAN - It did not start since the war.

MR. DICK (continues Brief)

One has only to refer to the depression period prior to the war to realize that in normal times no such assistance is granted. In any case, these are more in the nature of palliatives and do not form part of a long range policy. There is no doubt whatsoever, that a prosperous agricultural industry that markets its products as it must do outside Canada, increases freight movement on the railway and thereby more coal is required for the locomotives that handle the freight; also the increased purchasing power of the farmer makes traffic in the other direction and, what is more, in prosperous years the farmer purchases and consumes more coal, instead of going both cold and hungry.

It is our considered opinion that a measure of a National Fuel Policy will enure to the benefit not only to the coal producing provinces, but to Canada as a whole, irrespective of the amount of money necessary to bring it about.

Another factor that must be considered in establishing a National Fuel Policy is the whole railway locomotive fuel problem.

Railways are the largest single consumer of coal in Canada and while it is not fair to ask them to assume the financial burden of replacing imported coal for coal produced in Canada, nevertheless a long range policy should be established with them so as to extend the use of Canadian coal as much as possible. To do this a subsidy will have to be granted and here again it is necessary to make a similar study of the use of imported coal area by area, as outlined previously in this brief, so that the maximum tonnage of Canadian coal could be used at the minimum aggregate cost.

Imported fuel oil is used on locomotives in the mountain area of British Columbia, and while it is difficult to





secure accurate figures, it is believed that this fuel oil displaces approximately 320,000 tons of coal annually, (assuming that four barrels of oil is equivalent to one t.n of coal. This is the figure usually used in practice.) The elimination of imported fuel oil and its replacement by Canadian coal and Canadian fuels should be part of a National Fuel Policy.

The whole of the above is respectfully submitted.

EDMONTON CHAMBER OF COMMERCE."

BY MR. FRAWLEY - I was trying to find a passage in the Government of Alberta's brief which I thought was very well expressed, that there were two things to be decided: whether you should endeavor to build this country by broadening our International trade, or whether perhaps it would be the part of wisdom to increase the sale and production of Canadian coal within Canada. Do you recall that passage?

A. Yes sir.

Q. I suppose that is so?

A. Yes.

Q. It is a fundamental matter of the fiscal policy of the Government of this country which they will endeavor to do to make this country grow.

A. Yes.

Q. If we could get our wheat and livestock into the States without any duty, then it might be better to trade that off for all the American coal that Central Canada can absorb?

A. I would not go that far. If you take the Fordney-McCumber Tariff, and the Hawley-Smoot Tariff, these were pretty well aimed at the natural products of Canada, and as you know, at one time our wheat used to go in free to the Chicago market, and it has a duty today. Also our cattle used to go in and were on a quota basis.

Q. And to the Seattle and Tacoma markets?

A. Yes. So while there are possibilities along that line, we are living in a practical world and have to accept things as they are, but there is no doubt that a prosperous agricultural industry





in Alberta would mean the use of more coal. Because you take the depression years, and take the coal figures from then and now, and there is a difference of between two and two and a half million tons when our agricultural products were not moving as compared with the present time, so there must be a balance somewhere in between.

Q. After the war is over there will be some sitting around the table by the fiscal officers, between Great Britain, Canada, the United States, and several other countries.

A. Yes.

Q. Probably those officers would have the recommendations of this Commission before them at that time, as to coal, and I am just wondering, you have spent a good deal of time in these two briefs that you have presented, and I am wondering if you have anything to say to the Commission as to where the choice lies between those two rather divergent policies; whether we should have American coal come in and allow our products to go in more freely with the advantage which you say that brings to our domestic coal industry, or whether we should go Nationalistic and try to, as far as we can, supply our own needs, not completely, because that is not feasible for many many years, but supply our own needs even if we have to increase the subvention? Would you go that far?

A. Well frankly, while I would like to believe that the world is going to be a different place, frankly, I don't think it will be a great deal different. There will be certain measures that will be put in, that will be beneficial.

BY THE CHAIRMAN - Why should we be sitting here then in the interests of the coal industry, sitting on a coast to coast Commission.

BY COMMISSIONER McLAURIN - We could remove our tariffs. We don't have to ask Uncle Sam to make a Trade Treaty.

BY THE CHAIRMAN - I don't think you have given an answer to Mr. Frawley's question.

BY MR. DICK - I am not competent to answer it. If we could have a real prosperous West, and get the population here, we could



sell more coal, no doubt about that. We feel that we are entitled to consideration in the form of subventions, which are nothing new. The Government has been paying subventions and bounties for many many years. Take the Iron & Steel Industry.

BY THE CHAIRMAN - The best kind of protection.

BY MR. FRAWLEY - What troubles me is, if that is all there is to do about this coal problem, just continue subventions. What bothers me is why the Government of Canada should set up this Commission to study all the various problems in the industry all across Canada, because it could have called for a report from one of the Civil Servants if that was all there was to it.

BY MR. DICK - They might not believe us, but they would believe the Coal Commission.

BY MR. FRAWLEY - Then there is just this about it, after we have done all our investigating, we will just say "more subventions".

A. That will depend on what happens; on trade agreements after the war.

Q. Well are we going to go on trade agreements after the war? We don't care about these Americans, but if we are going to build a tariff wall, to put it crudely, the Americans are not going to like it.

A. As you see from the figures I mentioned, we buy something like two hundred million more from the United States than we sell them.

Q. We always come back to that. And I am quite serious, and believe that, after listening to the British Trade Commissioner, that we have to buy more from Britain if we expect to sell the products of this country to Great Britain.

BY COMMISSIONER McLAURIN - Might I conclude from this brief, are you authorized to say on behalf of the Edmonton Chamber of Commerce, that you advocate the reversal of our fiscal policy and do away with tariffs?

A. No.

Q. You have condemned them pretty thoroughly.

A. We have not condemned them, or commended them.





Q. Is that not a rather weak position for the Edmonton Chamber of Commerce to take?

A. We set out to show that we were suffering a disability in this province.

Q. Which could be removed by the removal of the tariffs?

A. No.

Q. You are suggesting that?

A. Yes.

Q. You say "we got hurt because of them"?

A. I might, yes.

Q. You point out that we take a loss, which is very substantial.

But the Edmonton Chamber of Commerce does not advocate the removal of those tariffs?

A. Oh no.

Q. Therefore you advocate their maintenance?

A. They take them as they stand. I am not speaking for the Chamber, but I think everyone is in agreement that the tariff as was originally constituted, is good.

BY THE CHAIRMAN - Are you associated with the Edmonton Chamber of Commerce?

A. Only just as a member.

Q. You are a member of that organization?

A. Yes.

Q. Of course you could not ask for the removal of tariffs then, if you were speaking for that organization?

A. That is right.

BY MR. O'CONNOR - We have asked to be specifically exempted from anything they have said.

BY COMMISSIONER McLAURIN - You are saying we will not meddle with the tariff at all, leave that, but you correct this whole thing by subventions. That is your case. I want to find out what position the Edmonton Chamber of Commerce takes.

BY MR. DICK - The question is this. Representing the Edmonton Chamber of Commerce primarily if you like, and its Association throughout the province, as well as being connected with the general Chamber, we are interested in the development of our



country. The major industry is coal mining. It suffers a disability and we have pointed out what that is, and we are asking the Government to help us out in the same way that they have helped out many industries in Eastern Canada in the way of subsidies and subventions.

BY COMMISSIONER MORRISON - Do for us what you did for our blood brothers.

BY MR. DICK - I remember quite well in the Iron & Steel Industry, the Dominion Government paid a bounty of over sixteen millions to establish the Iron & Steel Industry in Canada.

BY THE CHAIRMAN - To keep it running.

BY MR. DICK - Not based on Canadian ores, but on steel manufacture in Canada, in the Maritimes, and at the Sault; and they placed a bounty on zinc and copper, etc. Nothing new about a subvention or subsidy, and we feel if that is the only way out, we are entitled to it.

BY COMMISSIONER McLAURIN - The Edmonton Chamber of Commerce today is not taking any position by way of criticism of the existing tariff structure of the Dominion of Canada?

A. No.

Q. And the only solution offered is, give us twenty millions annually in subventions, to allow a fiscal policy which is detrimental to every producer in Western Canada?

A. I will not say that.

Q. And the Edmonton Chamber of Commerce is certainly not taking any position today reflecting a free trade policy?

A. That is right.

BY MR. FRAWLEY - You say we have this tariff situation and our solution for lightening the burden is, leave it as it is and get a lot more money to pull us up so that we can carry the burden?

BY MR. O'CONNOR - That is the only solution we know.

BY COMMISSIONER McLAURIN - What is it, the voting strength of this country that imposes this system, being too ready to vote substantial subventions. Is it not a little ingenuous to say that these same people are going to be generous and vote





twenty million dollars annually in subventions?

A. Sooner than lose their tariffs.

Q. But we cannot make them lose their tariffs?

A. I am not so sure.

BY COMMISSIONER McLAURIN - There is only one person that has taken a clean cut position. I am only speaking for myself, not for my brother Commissioners; but the bituminous operators definitely said, in Calgary, "wipe out your controls and tariffs and we will take our economic chances in the market". I think that is the only clear cut position we got anywhere.

BY COMMISSIONER MORRISON - They were not unmindful of the voting strength of Quebec and Ontario when they made that statement.

BY MR. DICK - But did they expect to have that carried out ?

BY COMMISSIONER McLAURIN - Candidly, I don't think they did.

BY MR. DICK - It is a nice thought.

BY THE CHAIRMAN - They were brave enough to come and tell us.

BY COMMISSIONER McLAURIN - We are getting to the point where passing out subsidies and subventions is not going to be the solution; subsidies here and there, and invitations for controls here and there; but they don't produce new wealth.

BY MR. FRAWLEY - It is easy for me to say let us trade our wheat and cattle for this coal, but what about Nova Scotia, she has nothing to trade.

BY THE CHAIRMAN - We are not interested in Nova Scotia today.

MR. E. SKARIN then took the stand. EXD. BY MR. FRAWLEY

Q. You operate a coal mine at Dodds, Alberta?

A. Yes.

Q. How far from Edmonton?

A. Sixty miles.

Q. And you are here to present a brief on behalf of that coal mine?

A. Yes.

Q. Do you wish to read it Mr. Skarin, or does it speak for itself?

A. Yes.

Q. You just want to pass it in and have it go on the record?

A. Yes.





MR. SKARIN then submitted his brief, which was marked Exhibit 142.

EXHIBIT 142 - Submission by E. Skarin on behalf of  
Dodds Coal Mine, Dodds, Alberta.

Exhibit 124 reads as follows:

"The owners of Dodds Coal Mine welcomes the opportunity to bring before this Commission vital matters connected with the operation of a strip coal mine in Northern Alberta.

The Dodds Coal Mine is, as stated, a strip mine, near Dodds, Alberta. The earth cover varies from 12 to 24 feet, and the coal seam has a thickness of from 4 to 7 feet. The coal has a high moisture content, and is not suited for storing in the Spring and Summer months, and because of this has a limited market.

The property was acquired by myself and daughter two years ago for \$12,900.00. This price included 110 acres of land and a railway siding about a mile long, together with a few small equipments. There were no buildings except a small cook house, a scale, office, and a small blacksmith shop. Since taking over, we have spent more than ten thousand dollars on improvements and buildings.

We have up to now operated the mine almost two years, and have marketed in that time approximately 55,000 tons. The sale price has brought us \$2.75 per ton for lump coal, retail sales at the mine, down to \$2.25, less dealers' commission, for power house coal loaded on cars. The larger portion of our output has gone for power house use.

The difficulties that we have met with in this short period of operation are briefly as follows:-

Shortage of help in the early fall, September and October; dropping off to the demand after New Year each winter when help is most freely available, resulting in expensive labour cost per ton of output, and low margin of profit. In the year just past we made only 14½ cents per ton.

A still further difficulty has centered around the



near impossibility of getting equipments, such as trucks, power, shovel or tractor for loading. We have tried to get a suited power shovel with no success, and are now endeavoring to get a tractor as an alternative, fitted with an overcast bucket. Due to this shortage of equipment, about 40% of our output has been loaded by hand power and wheelbarrows.

In addition, we have found that the necessity for improvements at the mine, and for better buildings, tipples, conveyors, tools, pumps, trucks, tractor or power shovel, and betterments to the railway spur, creates such a demand for cash and payments, that the allowable write-off before taxes have been found to be entirely inadequate.

The Income Tax people have told us that we can only write off our new mine buildings at the rate of 5% per year, which takes 20 years to recover the investment. This ruling appears to us most ridiculous when we consider the uncertainty of coal markets, and the likelihood that many mines will have to be closed down for periods of years at a time. The allowed write-off on equipment is somewhat better, but the delay in getting permission to buy even just a truck is a distinct handicap.

To overcome this shortage of cash for betterments at the mine, such as our Dodds Coal Mine, we believe a more generous allowance by the Income Tax people for mine depletion, would be the greatest help. In our case we are allowed 10 cents per ton for depletion of the mine. In other words, for every ton of coal mined, we can keep 10 cents out of profits, if any, without it being taken away from us in taxes. If the payments and outlays for improvements could be held to this amount, no one would have to be short of cash, but unfortunately this is not enough, and expenditures must be made at a much faster rate. If 20 cents per ton were allowed for depletion, I believe this difficulty would be almost entirely overcome.

I wish to point out the hampering effect caused by the many Boards and Governmental Agencies, demanding information and monthly reports. With all the handicaps due to shortage of





labour, shortage of railway cars, and shortage of equipments and parts, and above all, shortage of time in which to make replies, one is more than once tempted to tell these Boards and Agencies to please come and dig their own coal.

I can only judge these matters in the light of our experience during the past two years, or from April 1943. In that time we have had requests for information and reports from the following Boards and Agencies, some of which fairly swooped down on us for data:-

Department of Munitions & Supply  
Unemployment Insurance Commission  
Commodity Prices Stabilization Board.  
Wartime Prices & Trade Board  
National War Labour Board  
Department of Mines & Resources  
Emergency Coal Production Board  
Crown Assets Allocation Committee  
Income Tax Board  
Selective Service Board

To this is added the Provincial Boards:-

Workmen's Compensation Board  
Department of Lands & Mines (Royalties)  
Chief Inspector of Mines  
Board of Industrial Relations  
Health Inspection District  
The Weed Inspector in the Municipality.

To us it does seem possible to combine some Boards and to eliminate others. This, then, would lessen the work and worry for the mine operator and release many hands badly needed elsewhere. It would be welcome news for many mines if such released help could be made available. The more able ones could help in loading coal, and others not so able would still be useful in peeling potatoes, shovelling snow, or filling in reports for Governmental Agencies.

Finally I wish again to draw your attention to the main points I believe would offer the greatest help to coal operators in this district - wider and better markets for coal, shorter and quicker write-offs for improvements, and higher depletion allowances. If these things could be brought about I believe it would result in greater help than would an increase in the selling price of coal.

Respectfully submitted,  
DODDS COAL MINE  
Per (sgd) Emil Skarin  
Civil Engineer."



EXHIBIT No. 143 - Brief of Cadomin Coal Co. Ltd.,  
Luscar Coals Limited, and  
Mountain Park Coals Limited.

MR. MAYNE REID takes the stand.

This brief was to have been presented by Mr. H. R. Milner, K.C., President of Cadomin Coal Co, but unfortunately he could not get here.

MR. REID then presents brief, as follows:

Our three Coal Companies are members of the Western Canada Bituminous Coal Operators' Association, which has already submitted a brief on behalf of its members.

Whilst heartily endorsing that brief, and the recommendations of the Association, we think it desirable to bring before the Commission additional suggestions for the stabilization of the Bituminous Coal Mining Industry of Western Canada.

That some form of assistance is necessary if the industry is to be placed on a stable basis is commonly granted. During the war period, when we are short of man-power, and the demand for our product equals or exceeds the supply, the regular operation of our mines is practically assured. When labour becomes plentiful, and the demands for our coal from the Railway Companies, who are our principal customers, recede, it will require the utmost co-operation between producers and consumers to avoid a recurrence of the former chaotic condition of the industry, with price cuts, strikes, irregular employment and generally unsatisfactory conditions.

The principal market for these three Companies is afforded by the Canadian National Railways. This situation existed before and has continued during the war. It can reasonably be assumed that in the future as in the past the Railways, including the Northern Alberta Railway, will absorb approximately 80% to 90% of our output. To maintain steady employment and a reasonable standard of living for our people, it is essential that these Companies continue to supply the requirements of the Canadian National Railways on at least the present basis of production.





The General Fuel Agent of the Canadian National Railways recently inaugurated a policy of allotting to each of our Companies a definite weekly tonnage and indicated a willingness to endeavor to maintain this tonnage by expanding or contracting as need arises the area on the Railway system in which our coals will be used. Consequently, we suggest that the estimated normal coal requirements of the Railway system Eastward to the head of the Great Lakes be divided among the Companies now supplying the Railways in the form of definite monthly orders and that as times are good or bad and the requirements of the Railway system in that area increase or decrease, the necessary adjustments could be made by telescoping either Eastward or Westward the area allocated to us. To create this situation it will no doubt be necessary to re-establish the principle of subventions so that the Canadian National Railways, when using coal say East of Winnipeg, would not be paying substantially more than it would pay if the coal were imported from the United States.

For some years before the war the productive capacity of our Mines was substantially in excess of the available market. It is of the utmost importance that a situation should not again occur where demand and capacity to produce are out of line. That will happen, however, if new mines are permitted to open without regard to the available market. It is therefore in the interests of both labour and the capital employed in the industry that steps should be taken to restrict the opening of new mines or the re-opening of abandoned ones. It would also be in the interests of the Provincial Government which obtains a royalty on the coal mined by these Companies. Mines can only be operated efficiently if they are reasonably prosperous and can obtain sufficient capital. The greater the efficiency, the higher will be the coal extraction, less waste will result, and the royalty returns to the Crown will be increased.

It is realized that the price to be charged for the coal would have to be adjusted from time to time so that on the one hand the consumer would not be paying an excessive price and the producer on the other hand would not make excessive profits.





With the friendly relations that now exist between the producers and the Railways, this should not be too difficult. We hope that some arrangement can be reached so that any dispute can be determined by formal or informal arbitration.

So long as the producers profit is sufficient to give a fair return and also create an incentive to improve the methods of operation and steadily increase efficiency by the installation of plant and equipment to meet new developments in the industry, the producers will be satisfied. Increased efficiency is also, of course, in the interests of the consumer and of the men working in and about the Mines.

We would like to emphasize what has been said in the brief of the Western Bituminous Coal Operators' Association about the necessity of the railways carefully investigating the possibility of equipping themselves with more modern coal-burning engines. It seems to us that it would be just as unfortunate were Canadian coals replaced for transportation purposes by diesel fuel as by American coal - both have to be imported.

CADOMIN COAL COMPANY LIMITED  
(Signed) H. R. Milner, President.

LUSCAR COALS LIMITED,  
(Signed) Mayne Reid,  
Chairman of the Board.

MOUNTAIN PARK COALS LIMITED  
(Signed) Mayne Reid,  
Chairman of the Board.

Edmonton, Alberta,  
March 24th, 1945."

BY MR. FRAWLEY to Mr. Reid

Q. What is the situation on the Coal Branch? Are there any coal areas not yet taken up by lease, or is it pretty well all under lease now?

A. I would say that the most of the bituminous coal that is readily accessible to the railroad, is under lease.

Q. And that is what these three mines of yours are mostly interested in, bituminous coal?

A. Yes.

Q. So you have no immediate threat of any new persons going in



and taking up new leaseholds in there?

A. We don't know. We are not the owners of all the leases.

Q. There are people in there who own leases?

A. We don't know, we have not access to the records.

BY THE CHAIRMAN - Can you not go to the Mines Department here and get that information?

A. I don't know. We have never thought it desirable to do so. We have sufficient areas at the present time for our own immediate needs.

BY MR. FRAWLEY - How many operators are there besides these three?

A. K.D. I think is the only operator of bituminous mines. You have semi-bituminous mines on both legs of the Coal Branch.

Q. And you take the position that you feel you have a vested interest, or you want the state to recognize a sort of vested interest there in the existing operators and to, I think you say, prohibit the opening up of new mines unless there are greater markets?

A. Our position is this. No matter what stand you take, someone is going to suffer. If you leave it and prevent new mines opening up, then any lease-holder who has a vested interest in his lease is going to suffer. If, on the other hand, you throw it wide open to competition, then you will have a situation such as in the last depression where at Luscar for instance men were getting two days a week. From the operators point of view costs will necessarily rise if our operators are on a restricted sale. Then from the point of view of the Province you will have this situation. The coal seams in these mines are extremely liable to fire. If there is irregular operation of the seams the danger of fire will increase with inevitable loss to the Province. It is common knowledge in the mining industry that if your operation is irregular your extraction is not so high as on a regular basis. In these camps you have many workmen that own their own homes, in Luscar more than half of them, so someone will suffer.





BY COMMISSIONER MORRISON - That does not apply to the other two?

A. Not fifty percent, I believe.

BY MR. FRAWLEY - We were told that Cadomin was a closed camp.

A. I don't know.

BY COMMISSIONER MORRISON - How about the place where you sign yourself "Chairman of the Board"?

A. I can speak for that. It is not 50% there.

Q. Is there 10% there?

A. I could not answer that. Mr. Scott, can you say?

BY MR. SCOTT - I would say 25%.

Q. At Mountain Park?

A. Yes.

BY MR. FRAWLEY - If that is a good sound thing, and let us assume that it is - Those are Provincial Crown leases?

A. These bituminous mines, yes, I think. I think there is the odd parcel here and there that was bought from the Dominion Government, but at the present time none of those are being mined, so far as I know.

Q. And if the State agreed to your proposition and denied these lease-holders the right to operate their property, then don't you think the State would have the right to go a little further and almost become a junior partner in your business?

A. I am not saying that the State should, but either way someone must suffer.

BY COMMISSIONER McLaurin - The State does not want to become a junior partner at two days a week.

A. And I don't want the State for a junior partner. We have enough worries without that.

BY MR. FRAWLEY - Do you think if the State will take this position, to deny people there the right to operate their leases - they deny us that right and collect the rentals from us every year.

A. I would say if the State does not do that, the State is suffering more by the other policy, because your operation will be so wasteful that the State has to suffer. The royalties amount to considerably more than the lease rentals.

Q. Perhaps the solution would be to compensate your brother



lessees?

A. I am quite willing that they should.

Q. But the fact that you are allowed to operate should have something to do with it.

A. If you allow us to load it on to the cost of our operation.

Q. And you would prefer to be levied that sort of tax than to have the Government in business with you?

A. I would not prefer either.

BY COMMISSIONER MORRISON - Of course you are not objecting to the junior partner in the matter of subventions?

A. I am suggesting that the Railway Companies establish a policy of giving us the area to the Lake head based on normal tonnage and to expand it or contract it.

BY COMMISSIONER McLAURIN - Based on subventions?

A. I don't know whether it is economically feasible for them to bring the coal from Alberta.

BY MR. FRAWLEY - Your Company ship the coal out, and whether you get the subvention depends on how far Mr. Welby pulls it?

A. We don't get the subvention.

BY COMMISSIONER MORRISON - But if someone didn't get it, the coal would not go out?

A. No.

BY COMMISSIONER McLAURIN - You are a beneficiary of railway coal?

A. To some extent, yes.

BY THE CHAIRMAN - You will notice on these other briefs, between 1931 and 1939 there were a tremendous lot of mines closed down. Did that reduce the production of coal?

BY MR. FRAWLEY - It will show from the chart. I don't think it did. You close all the marginal mines and the bigger mines do better.

BY COMMISSIONER McLAURIN - It is idle to talk about regulation of mines unless you come forward with a specific formula. All we have had is, don't open any more bituminous coal mines.

A. I am talking of the bituminous mines in Alberta which supply the railway companies.



Q. Which covers what area?

BY MR. FRAWLEY - Sheep Creek, Blairmore and Coleman - he is speaking on behalf of those people.

BY MR. REID - Not only on behalf of those three companies; in my opinion it refers to the other companies, but I am not speaking for them.

BY COMMISSIONER MORRISON - Mr. Stubbs said something about control of development.

BY MR. STUBBS - I think we made it clear before, that what we were asking for was a continuation of that policy of control that had so long existed in the Province of Alberta, and had on August 4th of last year been given up for something else we do not like. The Government I think said that for some years there has been in Alberta an unwritten policy to control the opening of new mines, and we want that policy continued.

BY MR. FRAWLEY - In other words you don't want more Burns fields operated?

BY COMMISSIONER McLAURIN - I don't think any of us in this Commission should be talking about the whole problem of regulation without we say, here is the formula. No one has ever produced that. Sir Montague Barlow didn't, and the Government in their brief have not, and it is something we have to wrestle with ourselves.

BY COMMISSIONER MORRISON - Mr. Reid you would say in asking for the restriction of new operations, you would confine that to present mines being worked to capacity?

A. Or to reasonable capacity.

Q. And when they had reached that capacity, you would be in favor of leases 2190 or 2192 being opened and the coal made available?

A. Certainly.

Q. So you are not trying to create a monopoly?

BY MR. FRAWLEY - Vested interests is the word.

BY COMMISSIONER MORRISON - You can call it by any name you like.

BY COMMISSIONER McLAURIN - It is a municipality in which at this moment there is excessive competition.





BY MR. FRAWLEY - It is regimentation. I was merely putting it to Mr. Reid that if his proposition was sound, then I think he has to accept a certain measure of the Government looking into and having something to say about his business.

A. They have been doing that for the last ten years, and we can't prevent them even if we wanted to.

BY COMMISSIONER McLAURIN - You have a practical problem that you have to work out having regard to the facts as they exist, and we have a big problem here in Alberta.

BY COMMISSIONER MORRISON - Had the conditions continued that we had in the /30's, some of these companies you represent today would be out of business?

A. If those conditions existed today we would go out of business. If we were only getting the odds today that we did then, we certainly would.

BY THE CHAIRMAN - Then the other fellow would come in?

A. He would have to be more of an optimist than I am.

BY COMMISSIONER MORRISON - So in order to preserve the coal mining industry, would you not go so far as to say that this policy you advocate is sound if on no other ground than that?

A. If there is a very serious reduction in the tonnage of these two companies that I am associated with, I would unhesitatingly recommend that they go out of business.

Q. And that would certainly be a loss to the consumer?

A. Yes, and to the employment of labour.

Q. To the Province of Alberta?

A. Yes, because the difficulty of getting new capital to the extent required in opening up these mines is very very great.

Q. And generally speaking these bituminous mines are operated economically?

A. Speaking for our own two companies, there are Scotchmen associated with them.

Q. But they hire the Englishman to do the job for them?

A. But that is because he has been associated with the Scotchmen all his life.

Q. And there are no distributing companies, or subsidiary



companies, making a living off of these companies?

A. None whatever.

BY MR. FRAWLEY - You would not stand for that?

A. Our President and Vice President, who are from the Old Country do not draw even 5¢ a year.

BY COMMISSIONER McLAURIN - Don't you compete with the sub-bituminous?

A. Yes, but their coal is on a different price basis altogether, and there is a certain amount of sale probably on the Coal Branch, Coal Valley.

BY COMMISSIONER MORRISON - I was very interested on page 3, the second paragraph, you say: "With the friendly relations which now exist between the producers and the Railways" - I would like to know how long. You say it exists now, and I would like to know how long these relations did exist?

A. I can say I was made Chairman of the Board of Directors of these two companies in the Fall of 1942. Since then we have been endeavoring to establish friendly relations with the Railway Companies.

Q. What I am interested in is, in your endeavors?

A. I think on their part they have been working on the same lines, and we are discussing our problems in a friendly way today.

Q. How about the price, is it friendly too?

A. The price is controlled today by the Coal Administration, and any time we have been dissatisfied we have made application to the Coal Administration.

Q. You refer to chaotic conditions and price cuts.

A. That is ancient history and really goes back to a period before I was a Director.

BY MR. FRAWLEY - Do you fear the removal of the price control where you will be left to bargain this out?

A. No. I think we can carry on. The Railway wants the coal and we want to supply them, and if we can't get together, then the mines will have to close up.





Q. You don't sell any coal that moves as commercial traffic over the lines of railway?

A. Yes, but not very much. There was a period when we supplied a large quantity of coal to the smelters at Flin-Flon, but that passed out of our hands. But we still ship from Mountain Park a certain amount each year.

BY COMMISSIONER MORRISON - You say <sup>if</sup> there was trouble in the camp and friendly relations got out of hand, you appealed to the Coal Controller?

A. No, I said when we were dissatisfied with the price. Costs during the war have kept on increasing and since 1942 we have had to make applications to the Board and have hearings, and the Coal Administration has granted a slight increase.

Q. Did the Railway Companies appear at those hearings?

A. I expect they were consulted. We made our representations in writing.

Q. They didn't appear to oppose your applications?

A. I have no doubt they did, or at least that they didn't consent.

Q. I am anxious to find out. You appealed for a price increase. I would be interested to know if the Railways opposed that application?

A. My reference to friendly relations dates back to about a year ago when the General Fuel Agent for the C.N.R. came and we had a meeting.

Q. You could not be anything else but friendly to the gentleman who holds that office.

A. That answers your question.

Q. But also as a Board of Directors. He signs himself as you do, Chairman of the Board.

A. I have never met the gentleman, Sir.

Q. Sometimes these fellows who sign themselves "Chairman of the Board" have a lot more authority than the genial fellows who go out to do the work.



BY THE CHAIRMAN - Don't you think one of the reasons this Commission was appointed was to see if some means could not be devised to improve the coal production of this country?

A. I do.

Q. So if you were able to get markets and new mines could be opened, you would have no objection?

A. I have no objection to anyone getting in the industry so long as we do not slip back to two or three days a week.

Q. It will be adding to the wealth of this country if we get a larger production?

A. If we are making money we have no objection to anyone else making it.

Q. Under present conditions you say you will agree with me that it would be rather a foolish thing for the Government of this country to allow new mines to be opened up under present conditions of marketing?

A. I think so. From the experience we have had in the previous depression, it points clearly in that direction.

BY THE CHAIRMAN - We have had a very pleasant time in the Province of Alberta, although there is one objection I do have, that my brother Commissioners here kept us too long in Calgary and not long enough here. This is a far more pleasant country than away down - is it North or South. I must say that the Government brief presented here was very illuminating, at least so far as I was concerned; perhaps my brother Commissioners knew something of it before. And the only National Policy that was ever evolved in this country by Parliament was the one that was criticized here today. We are asked to devise a second one. I am rather opposed to a National Policy having in view what the first National Policy did to this country.

I thank all of you who read your briefs here, and I assure you that whatever we do, we will try not to do anything against the coal industry of Canada.

4:30 P.M. HEARING ADJOURNED

(Page 2564 follows)



ROYAL COMMISSION ON COAL

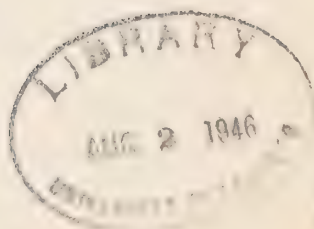
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ROYAL COMMISSION ON COAL

Regina, Sask.,  
April 19, 1945.

The Royal Commission on Coal convened at the Court House, Regina, Saskatchewan, at 10.30 A.M. on Thursday, April 19, 1945.

## PRESENT:

Hon. Mr. Justice W. F. Carroll, Chairman  
Hon. Mr. Justice C. C. McLaurin, Commissioner  
J. J. Frawley, K.C., Commission Counsel  
R. D. Howland, Secretary

BY THE CHAIRMAN: I am sorry to have to announce that owing to sickness in his family Mr. Angus Morrison, the other member of the Commission, is unable to be present here today. We are not quite certain whether he will be with us at any time during our Regina visit. It is no fault of his own.

BY MR. FRAWLEY: Hon. J. L. Phelps, Minister of Natural Resources and Industrial Development, is here to present the brief for the Province of Saskatchewan.

HON. J. L. PHELPS: On behalf of the Province of Saskatchewan, before I present the brief, sir, I would like to extend to the Commission our greetings to you and our hopes, sir, that the mission that you have will prove a most successful one. We realize, sir, that the problem before the Commission at this time is one of great importance not only to the Province of Saskatchewan but to the other provinces of the Dominion of Canada and the Dominion as a whole. At this time we hear a good deal of talk about reconstruction. I think one only need to state it very casually to be convinced that fuel and power are two of the necessary things that will play a very important part in any reconstruction





programme. that we have in mind, and I think it is time that we have a thorough study into all the facts contributing to the welfare of the coal industry of the Dominion.

And now, sir, in presenting the brief on behalf of the Provincial Government of Saskatchewan I want to say that while we are intensely interested in the problems that affect our own particular province, we are not selfish to the point that we want to put those particular problems forward to the exclusion of others. I mean in this way, that while we are anxious that those problems may find a solution, we are most anxious that we not take any steps that would prejudice the coal industry of the entire Dominion of Canada.

I want to also say, sir, that while we are presenting the brief to you we want to assure you that we hope your stay here will be enjoyable and if there is any further information or assistance that the Department or the Government can render to this Commission I hope you will feel free to ask and it will surely be given.

In presenting this brief I want to make a further explanation. It is very recently that we completed our session of the Legislature and it has been very difficult to make the time available that was required in the preparation of a brief of this kind, and due to the fact that printing is very difficult at this particular time due to a shortage of help, it was only very, very recently that this report in its present form was available, and I may say also in their haste to finish it--I am not blaming them a bit--they didn't even put very much punctuation in the brief and it may be a little difficult to read. However, it is not the punctuation we are interested in; it is the ideas that are contained.

I want to say that if there is anything further, as I said before, we will be glad to explain it further.

Exhibit 144 - Brief presented by the  
Province of Saskatchewan

MR. PHELPS proceeds to read Exhibit 144:



Gentlemen:

The Department of Natural Resources and Industrial Development extends, on behalf of the Province of Saskatchewan, a welcome to the Royal Commission on Coal commencing its Saskatchewan sittings at Regina, April 19, 1945.

We appreciate the opportunity of presenting to your Commission various aspects of the coal mining industry in Saskatchewan as they affect the national coal problem.

It is the sincere wish of the Government of Saskatchewan that the efforts of the Commission will be attended by a large measure of success and that its final recommendations will lead to a stabilized and prosperous coal industry throughout the Dominion.

Please be assured of our wholehearted co-operation and assistance wherever possible.

HON. MR. PHELPS: I want to say, sir, before I read the brief proper, that I am rather green at this particular kind of job and I hope that you will bear with me. I have not had time to study this since it was completed as well as I should, but again I say it is the ideas, it is not what is between the lines. (Continues brief):

Coal is an essential national industrial and domestic commodity. There can be no question of the important part played by coal in the national economy or the necessity for maintaining a healthy and stabilized coal mining industry. The coal reserves of a nation are often a measure of its present and future prosperity and a coveted asset that should be treasured and well guarded against wasteful exploitation.

The appointment of the Royal Commission appointed to study Canada's coal problems is timely, and it is to be hoped that when the evidence is all in, the Commission will be made to make recommendations which if acted upon, will go a long way toward solving many of the problems which are at present preventing the orderly production and marketing of coal and



will eventually lead to a stabilized and prosperous coal industry throughout the Dominion.

In presenting this Submission, from the Province of Saskatchewan to the Royal Commission on Coal, it would be well at the outset to state what we feel to be the goals to be attained as a result of the present investigation and the major considerations to be given preference in seeking a solution to Canada's coal problem, whether considered from a Provincial or a National viewpoint.

#### OBJECTIVES OF A NATIONAL COAL POLICY

1. To maintain the industry and encourage its expansion.
2. to establish and maintain satisfactory relations on an equitable basis between Canada and other countries in regard to coal imports.
3. To ensure an adequate wage to labour and working conditions in coal mines that compare as favourably with the working conditions in other industries as the conditions peculiar to coal mining permit.
4. To ensure that development is consistent with the proper conservation of Canada's coal resources.
5. to make Canada less dependent on foreign sources of coal for its fuel requirements.
6. To intensify the effort and enlarge and broaden the scope of Provincial and National participation in coal research.
7. In accomplishing the foregoing, to safeguard the interests of the consuming public by demanding from the industry efficient and economical management in their conduct of all phases of the coal mining industry.

#### SASKATCHEWAN'S COAL MINING INDUSTRY AND ITS PROBLEMS

The presently existing situation in the Saskatchewan coal mining industry is obscured by the various war measures adopted to increase coal production and to keep the industry





stabilized during the period of national emergency caused by the war.

The Saskatchewan coal mining industry has through the years provided a distinct service to the citizens of the Province. It has made available a cheap fuel in an area where extreme climatic conditions make fuel costs an essential and important item in the family budget. The industry has also played an important in alleviating the critical fuel situation during the war years by increasing the output of coal from 960,000 tons in 1939 to 1,664,207 tons in 1943. Many times Saskatchewan mines supplied emergency calls for coal which other fields could not take care of. It should also be pointed out that in spite of increased cost of labour and materials of all kinds, the price of Saskatchewan lignite for the domestic sizes is lower today than at the beginning of the war. This was made possible by increased production and expansion of strip mining which reduced production costs.

Perhaps the greatest single factor contributing to the loss in realization to the Saskatchewan operators may be summed up in the expression "growing pains." As long as the industry was content with a limited market in the most economic and non-competitive or mildly competitive areas, and to confine their activities largely to supplying the domestic market, there were few disturbing influences and the industry remained fairly stable and profitable.

#### STRUGGLE TO OBTAIN NEW MARKETS

As new operators were attracted to the field the industry became overcrowded and overproduction resulted, the only answer to which was the acquisition of new markets. These could only be obtained by entering and annexing a portion of a highly competitive market in which Alberta, British Columbia and American coal was already firmly established. It is a tribute to the ability and initiative of the Saskatchewan coal mining operators that they have been successful in acquiring



and holding twenty percent of the Saskatchewan and thirty percent of the Manitoba coal markets. That they have been able to do this in the face of the handicaps imposed by the very nature of their coal proves that Saskatchewan lignite must be considered as an economic fuel and entitled to compete on its merits in those markets to which it has aspired.

The struggle to establish Saskatchewan lignite in these highly competitive markets has been long and arduous. At the outset it was necessary to break down the natural prejudice of consumers against a fuel which competitors have ignominiously referred to as "black mud" and to which they were unaccustomed.

The Dominion Bureau of Statistics in "Coal Statistics of Canada 1942" compares the heating value of Western coals as follows: Saskatchewan Lignite 6,500 to 7,500 British Thermal Units per lb.; British Columbia and Alberta Bituminous, grade 1, 14,000 B.T.U.; grade 2, 13,000 B.T.U.; grade 3, 11,000 to 12,000 B.T.U.; Alberta and British Columbia Sub-Bituminous 10,000 to 11,500 B.T.U.; and Alberta and British Columbia Lignite domestic 7,500 to 10,000 B.T.U. Reducing these figures to average values, a comparison is obtained indicating the amounts of Saskatchewan lignite required to equal the respective heat unit values of Alberta and British Columbia coal.

## HEAT VALUE RATIO

ALBERTA & B.C. COALS	AVERAGE B.T.U.	ALBERTA AND B.C.	SASK. LIGNITE
Bituminous Grade 1	14,000	1	2
" Grade 2	13,000	1	1.85
" Grade 3	11,500	1	1.64
Sub-Bituminous	10,750	1	1.53
Lignite	8,750	1	1.25

It follows from the foregoing figures that to deliver to the consumers coal with an equivalent amount of heat units, Saskatchewan producers must mine, prepare, handle and pay the freight on two tons of coal to equal the highest grade





Bituminous and one and one-quarter tons of coal to equal the lower grade coals produced in the Alberta coal fields.

MARKETING DIFFICULTIES DUE TO NATURE  
OF LIGNITE

Saskatchewan lignite slacks and crumbles if exposed to the sun and air for any length of time and therefore must be used within a reasonable time after it is mined or else provided with covered storage. Its high moisture content, usually in excess of 30 percent, adds to the costs of handling and transportation.

Lignite ash has a relatively low fusion temperature which presents problems where the temperatures required are above the fusion point of the ash.

Probably the greatest single drawback to Saskatchewan lignite with which the producers have had to contend in establishing it in the industrial market is the necessity of providing special burning equipment. In addition to the low fusion temperature of the ash the lignite has no coking qualities and on rapid heating it disintegrates into relatively small fragments. The breaking down of the lumps tends to retard the flow of air through the fuel bed and slows down the rate of combustion. The disintegrated coal also tends to fall through ordinary grates. These drawbacks have been overcome through the development of special equipment and boiler settings especially designed to burn the coal to the best advantage.

Thousands of domestic users burn lignite with fair satisfaction in the ordinary furnace equipment but the trend in domestic heating is toward automatic furnace stokers and some form of forced draft, requiring less attention and providing automatic temperature control. With such appliances lignite is a very satisfactory and economical domestic fuel.

In order to induce the larger industrial and domestic users to instal equipment suitable for burning lignite,



Saskatchewan producers had to convince prospective customers that real economies were possible with lignite and without incurring noticeable losses in heating or power plant efficiency. The industrial users had also to be assured of a dependable supply of lignite of uniform quality and degree of preparation and at a low price subject to the narrowest range of fluctuation. This the producers were able to do by increasing the scale of their mining operations, using more highly mechanized mining methods, and in particular, by turning to strip mining wherever the coal was sufficiently close to the surface to warrant recovery by purely surface mining methods, which we will refer to as strip mining.

COMPETITION AND DRIVE FOR NEW MARKETS  
RESULT IN LOWER REALIZATION

The keen competition from other Western coal producers, who did not take their loss of markets to Saskatchewan lignite lying down, forced the price of coal lower, and in spite of reduced production costs, the Saskatchewan producers began to find themselves in an unenviable position.

Although the producers were able to offset, to some extent, the effect of lower selling prices for their coal by expanding their markets and the use of cheaper mining practices, permitting lower production costs, the realization on a ton of coal, not including subsidy, which amounted to \$1.80 in 1928, dropped to \$1.31 by 1939 and was only \$1.38 per ton in 1943.

SUBVENTIONS

Besides the competition between Saskatchewan, Alberta and British Columbia coal producers, all the Western Canadian coals were in direct competition with American anthracite in the Manitoba and Western Ontario markets. To aid Canadian producers to meet this competition, and in line with the policy of the Federal Government for a maximum of Canadian fuel independence, the latter through the Dominion Fuel Board, devised a scheme of assisted freight rates called subventions, on



Canadian coal into markets where it was in competition with American imported coal.

Subventions and subsidies are inimical to policies looking for freer and wider trade relationships, whether external or internal. Subsidizing the Canadian coal industry, except as a measure necessary in time of war, should only be considered after every other solution to the problems confronting the industry have been exhaustively examined and found to be ineffective.

HON. MR. PHELPS: I might elaborate on that point. We are quite strong as a Province in this regard. (Continues brief):

If the industry can only be adequately maintained through a wide application of the unsound policy of the use of extensive permanent subsidies, then there would appear to be a good argument for the complete nationalization of the Canadian coal industry.

If no other solution to Canada's coal problem is advanced and subsidies and subventions are to be continued as a general policy, then they should be subjected to a searching enquiry and reviewed with a view to determining whether or not any discrimination exists between producers in the separate Western fields and to ensure that future subventions are equitably applied to the whole industry. The following statement shows the tonnages and costs to the Dominion Government of Western Canadian coal moved under subvention from 1933 to 1944:





Calendar Year	Alberta		British Columbia	
	Tons	\$	Tons	\$
1933.....	185,479	271,964	153,840	128,154
1934.....	213,820	333,977	207,864	165,937
1935.....	221,470	344,740	219,796	181,439
1936.....	232,501	345,480	274,654	238,025
1937.....	233,628	335,282	289,843	258,122
1938.....	248,875	357,218	226,626	183,544
1939.....	368,107	592,376	410,275	428,363
1940.....	553,425	1,083,436	413,814	520,451
1941.....	802,351	1,578,259	434,328	669,529
1942.....	558,107	1,086,024	464,744	605,571
1943.....	121,986	89,019	149,778	118,724
1944.....	141,187	120,261	73,486	46,572
Totals....	3,880,936	6,538,036	3,310,048	3,544,441
Average per ton	\$1.68		\$1.07	

Calendar Year	Saskatchewan	
	Tons	\$
1933.....	130,966	54,085
1934.....	144,228	42,129
1935.....	138,584	32,252
1936.....	146,894	38,136
1937.....	163,970	38,031
1938.....	145,615	33,760
1939.....	159,340	37,592
1940.....	41,256	25,950
1941.....	22,677	21,840
1942.....	13,649	13,145
1943.....	10,963	10,535
1944.....	16,027	15,377
Totals....	1,134,169	362,832
Average per ton	\$0.32	

It would appear from the table showing the quantity of coal moved and the subvention paid that in the industrial market of Manitoba, Saskatchewan lignite can replace American coal at a considerable less cost to the Dominion Government in the form of subventions than any other Western Canadian coal, even after making generous allowance for the difference in heating value of the respective coals.

#### EFFECT OF INCREASED SALE OF SMALL SIZES

To add to their troubles, the operators in enlarging their industrial market, increased the amount of the small coal sizes needed to such an extent that not nearly enough small coal was obtained in the ordinary process of mining and it became necessary to crush lump coal to make up the



deficiency. This meant that lump coal, which demanded a much higher price on the domestic market, had to be crushed and screened and sold at the lower market price for industrial coal.

Crushing and screening the coal to make the small sizes also increases the amount of extreme fines and slack, a great deal of which cannot be marketed, or if marketed, obtains a very low price.

One advantage of increasing the proportion of the total coal output going to industrial users has been to partially offset the seasonal nature of the industry. The domestic market is a winter market while the industrial users require coal during summer and winter, resulting in more man-days work peryear for miners and other employees.

THE EFFECT ON THE FIELD OF THE INTRODUCTION  
OF STRIP MINING

It has already been mentioned that strip mining made possible the great increases in the output of Saskatchewan lignite recorded since 1930 when the first large scale strip-ping operation was initiated. This increase is shown by the following table, which also shows the value of the coal produced and the realization obtained from its sale:

Calendar Year	Production Short Tons	Value \$	Realization Per Ton \$
1929.....	580,189	993,226	1.71
1930.....	579,424	968,863	1.68
1931.....	662,836	945,259	1.43
1932.....	887,139	1,229,449	1.39
1933.....	927,649	1,285,996	1.39
1934.....	909,288	1,241,130	1.37
1935.....	921,785	1,293,668	1.40
1936.....	1,020,792	1,463,680	1.49
1937.....	1,049,348	1,494,337	1.56
1938.....	1,022,166	1,380,416	1.41
1939.....	960,000	1,255,862	1.31
1940.....	1,322,763	1,713,478	1.30
1942.....	1,301,116	1,760,065	1.35
1943.....	1,664,207	2,295,606	1.38
1944.....	1,393,092		

The first company mining coal in Saskatchewan by means of strip mining was doing business by October, 1930. In that year the Saskatchewan production amounted to 580,189 tons. By 1943, production rose 185 percent, the total production being 1,664,207 tons.





BY MR. FRAWLEY: The strip mining has brought the price down from \$1.71 to \$1.38?

HON. MR. PHELPS: That has been the effect of it. It has been one of the factors at least, and the introduction of other mechanical production methods, of course. (Continues brief):

As the amount of coal produced by strip mining increased, the mines producing by underground mining methods found it harder and harder to compete and competition became so keen that a price level was reached, with the result that underground operators were forced to the wall, and if it had not been for the war and the various measures instituted by the Dominion Government to bolster the coal mining industry, it is doubtful if a collapse could have been prevented in that section of the field mining coal by underground mining methods.

MR. PHELPS: I would draw to your attention, sir, that that is most important at this particular time. (Continues brief):

To understand the position between the strip mining companies and the underground mining companies, it is necessary to show to what extent tonnage in the field is derived between the two mining methods. The following table shows the coal mined by strip and underground mining methods for 1943:

<u>District</u>	<u>Tons Mined By Stripping</u>	<u>Underground Tonnage</u>	<u>Total</u>
Estevan.....	943,739	678,401	1,622,140
Assiniboia.....	88	30,574	30,662
Shaunavon.....	2,099	9,306	11,405
Totals.....	945,926	718,281	1,664,207

It will be evident from the above table that the Assiniboia and Shaunavon Districts contribute little to the total provincial production and may be omitted from the present discussion; they are, nevertheless, important as a source of supply for local markets.



In the Estevan coal field in 1943, there were 32 mines in operation, of which 12 were shipping mines (that is mines shipping coal over railroads) and 20 were small waggon mines. Of the shipping mines, the two largest mines produced 1,224,469 tons or 75 percent of all the coal mined. The largest mine produced 52 percent of all the coal mined in the Estevan field, of which 81 percent was strip coal. The other large mine produced 23 percent of the field's output, of which 16 percent was strip coal. The remaining 10 shipping mines produced a total of 439,738 tons, of which 133,111 tons was strip coal produced by two strip mines, leaving 8 mines producing 306,627 tons, all from underground mining. The 20 small waggon mines in the Estevan field produced a total of 13,721 tons.

HON. MR. PHELPS: The next paragraph dealing with the possible use of gas is something that we feel, sir, ought to be taken into consideration too, so we include here a paragraph dealing with. It is one factor in the study of this matter we feel should not be ignored. (Continues brief):

#### COMPETITION FROM NATURAL GAS

At various times in the past, schemes have been proposed for supplying Saskatchewan cities with natural gas from gas fields in Alberta, and Montana in the United States. None of these early schemes passed the preliminary investigation stage. These projects have apparently been forgotten for the time being but there is no guarantee that they will not be revived at some future date. On February 29, 1940, the Saskatchewan Local Government Board, after considering the merits of the scheme, approved the granting of a franchise by the City of Saskatoon to the Northern Natural Gas Co. Ltd. to supply Saskatoon with natural gas. The gas is to be obtained from the Lloydminster and Unity Valley gas fields in Saskatchewan, as far as possible, with any additional requirements to be obtained from Alberta gas fields adjacent to Lloydminster. No



construction work on the necessary pipe line and City distribution systems has been carried out to date.

A rough estimate of the displacement of Alberta coal by natural gas in the city of Saskatoon, if the project is proceeded with, is as follows:

Estimated gross consumption of gas in the first five years--10,000,000,000 cu. ft.

Equivalent in tons of Alberta coal--550,000 tons. This would mean that the average number of tons of Alberta coal displaced annually by natural gas in Saskatoon would be 110,000 tons, on a basis of 80 percent Drumheller and 20 percent higher grade coals.

HON. MR. PHELPS: I might add to that that very recently there have been further developments along the lines of producing natural gas in the province of Saskatchewan which may have a further bearing on this particular point. (Continues brief):

EXTENT OF SUPERVISION AND REGULATION  
BY GOVERNMENT

Following out the recommendations of the Turgeon Coal Commission, 1934, Saskatchewan passed the Coal Mining Industry Act, 1935. The Act and Regulations made thereunder gave the Minister of Natural Resources a large measure of control over the industry for the purpose of stabilizing it and effecting the orderly production and marketing of coal. The big stumbling block to the application of Government control of the industry, as provided by the Act and Regulations, is that nearly half of Saskatchewan's coal production is marketed in the province of Manitoba, and whatever control can be exerted in the Manitoba market is wholly indirect and dependent upon the goodwill and good faith of Saskatchewan producers.

The Act provides for the licensing of all coal mines. Agreements were drawn up and signed by the operators, setting out the rules of fair competition and including a minimum





price structure, a minimum wage scale, code of ethics, etc. The Government on their part undertook to see that the rules were observed and the agreements kept. Application of the controls succeeded in removing many of the minor differences between labour and management and in improving the general working conditions of the miners. For a time, control of competition between the operators through the signed agreements worked fairly smoothly but eventually trouble arose and in 1938 certain of the operators declared their intention of lowering the price on lump coal sold in the Winnipeg market. A meeting of all operators was arranged and held in Estevan on April 27, 1938, and a second meeting on May 26, 1938, at which briefs were presented by various operators, either for or against maintaining the existing price agreements.

BY THE CHAIRMAN: If a person wishes to open a new mine in Saskatchewan must they get a Government licence to do so?

HON. MR. PHELPS: Yes sir.

BY THE CHAIRMAN: That is, the Government may refuse to grant a person a licence?

HON. MR. PHELPS: Yes, that would be quite within their right. (Continues brief):

Briefly, the arguments put forward were as follows:

Certain operators, including the largest operator in the field, declared that they were against Government control of coal prices but were willing to continue price control by agreement if a new basis of prices and classifications were worked out, and in particular, a price scale providing for a lower sale price on the larger sizes (that is domestic coal sizes). They contended that:

1. A lower price on large sizes would result in an increased market, enabling them to provide more man-days work for employees and lower production costs.
2. The trend in coal prices is toward a uniform price for all sizes from stoker up.



3. That the present spread in prices between small and large sizes would ultimately result in a diminishing market.

The smaller mines, including most of the shaft mines, had directly opposite views and were in favour of maintaining the existing price agreements for the following reasons:

1. The larger percentage of their output was domestic coal and any reduction in the price of lump coal would spell ruin for them.
2. A lower price schedule would result in lower wages.
3. Support for the employment factor is just as important as increased tonnage, and that the shaft mines are the more important employers of labour.
4. To have a controlled market in Saskatchewan and a wide open market in Manitoba is utterly impossible, if there is to be any degree of stability in the industry.
5. There is strong evidence to support a claim for an advance in price on small sizes especially in the Manitoba market.
6. The policies of and control provided by the Coal Mining Industry Act are preferred to open competition as assuring a measure of security not otherwise attainable.

HON. MR. PHELPS: I believe at that time that was a point that was very much emphasized by the smaller operators, that they felt that that protection was essential. (Continues brief):

As no agreement between the opposing factions in the industry could be obtained, the Government set by an Order in Council dated September 13, 1938, a schedule of minimum prices for Saskatchewan coal at the minehead. The Order in Council gave a fair measure of control in the Saskatchewan market but left the Manitoba market open to competition between the Saskatchewan operators, and although no serious price cutting occurred, there was considerable complaint that certain groups





of operators were taking advantage of the open Manitoba market to maneuver their coal into more favourable position at the expense of other Saskatchewan competitors. In October, 1941, the Wartime Prices and Trade Board froze the market price of all coals and have controlled coal prices since that date.

The conclusion to be drawn from the foregoing is that legislative measures for controlling the industry taken in Saskatchewan offered only a partial solution to the problem of maintaining a stabilized coal mining industry in this Province and that the real solution may be in inter-provincial agreements backed by Dominion legislation.

HON. MR. PHELPS: We emphasize again, sir, that point. We feel that the provinces cannot do this on their own initiative. It must be a co-ordinated effort. (Continues brief):

#### LOCATION OF FIELDS AND COAL RESERVES

The coal mining industry in Saskatchewan is older than the Province itself. As early as 1887, eighteen years before Saskatchewan became a Province, the Dominion Government records indicate a production of four hundred (400) tons of coal valued at Eight Hundred Dollars (\$800.00). The earliest coal mined came from the banks of the Souris River, near Estevan and was floated down the Souris River to Winnipeg. From this small beginning production has increased year by year with few periods of recession until in 1943 the mines of the Province produced 1,664,207 tons.

Saskatchewan coal is all lignite but in spite of the handicap of a low ranking fuel, if it were not for the disadvantage imposed by geographical location of deposits in close proximity to the higher ranking fuels of Alberta and British Columbia, the coal reserves of Saskatchewan would be of far greater importance both provincially and nationally. As it is, the extensive coal measures of Saskatchewan, owing to their uniform and persistent occurrence over wide areas and their nearness to the surface making for cheap mining, constitutes



a present and future potential asset of no inconsiderable importance.

The last estimate of Saskatchewan's coal reserve was made a good many years ago and the figure should probably be revised drastically downward. They show that the Province has an actual coal reserve of 2,412,000 metric tons underlying an area of 306 square miles and an approximate estimate of a probable reserve of 54,400,000,000 metric tons underlying an area of 13,000 square miles. Even if these figures were halved the coal measures of Saskatchewan would last for hundreds of years at the present rate of production of about 1,500,000 tons annually. The total production since the inception of mining in the Province is approximately 36,000,000 tons. As only part of the coal is recoverable, depending on the mining method used, this would represent a probable total depletion of 80,000,000 tons.

The location of the coal bearing formation in Saskatchewan is shown on the accompanying sketch map. It will be seen that the coal areas lie principally in the southern part of the province. The blacked in areas indicate locations where development is taking place or where coal seams are known to occur either through the presence of outcrops in valley sides or through having been encountered during boring operations.

The coal seams are not necessarily continuous throughout the shaded area, but in all portions there are coal possibilities. It is quite possible that small outliers of the coal bearing formations may occur further north in the Province, but generally speaking, coal is not likely to be found outside of the shaded areas as shown on the map.

There are three coal mining areas in the Province, namely the Souris Valley area, the Wood Mountain-Willow Bunch area and the Cypress Hills area. The seams worked all lie within 150 feet of the surface and range in thickness from one to twenty feet.

The best known coal area in the Province and the one



receiving the greatest amount of attention from the coal mining companies is the Souris River coal area.

The Souris River coal area is part of a larger basin shaped coal area extending south into North Dakota. The centre of the basin is probably in North Dakota south of Estevan and the seams dip towards this centre.

The greatest development has taken place in an area comprising six to eight townships extending south and east of the town of Estevan and including the villages of Bienfait, Shand, Roche Percee, Taylorton and Pinto.

This is the principal coal-producing district of the Province, and is served by both the Canadian National and Canadian Pacific Railway systems. The district produces 97 percent of the coal produced in the Province. There are approximately 35 mines in the area, many of which are small waggon mines producing a few hundred tons of coal annually. The coal is recovered by underground mining methods or by stripping the overburden above the coal with large excavating shovels, after which smaller shovels dig and load the coal into trucks which carry it to modern coal cleaning and preparing plants. The whole operation is highly mechanized and makes for low production costs.

In the underground mines, the coal is recovered by the room and pillar method of mining. The larger mines are equipped with modern coal handling equipment including coal cutter, mechanical haulage, screens, crushers and box car loaders. The whole trend in the field is towards greater mechanization and better preparation, resulting in cheaper production and a more satisfactory fuel.

There are a number of coal horizons in the Estevan area. The upper seam at many points is sufficiently close to the surface to permit recovery of the coal by stripping off the overburden. This seam probably averages five feet of thickness. It is subject to considerable lateral variation both as to quality and quantity. In many places, erosion has removed the





seam wholly or in part and elsewhere the nature of the cover has permitted deterioration in quality.

The lower seam in the Bienfait-Taylorton area, which has produced most of the coal mined to date, averages about nine feet in thickness but is also subject to lateral variation, sometimes splitting into two seams and sometimes deteriorating to coal of unmineable quality. Although flat lying the seam has a natural roll which in places is fairly pronounced, carrying the seam to within eighty feet of the surface at some points and to as deep as one hundred and fifty feet at others. There is evidence of faulting and the seam was found to cut off abruptly in at least one mine.

To the west of the Estevan area lie two other coal areas designated as the Wood Mountain-Willow Bunch coal area and the Cypress Hills coal area. The Wood Mountain and Willow Bunch coal area is much more extensive than the Estevan field. The coal seams are not as continuous or uniform as the Estevan seams. They vary widely in thickness in some places reaching a thickness of 20 feet. Lignite is mined in the area for local use only, no coal being shipped by rail from this field.

In the Cypress Hills coal area the seams are thinner. Mining is or has been carried on for local use in the vicinity of Shaunavon, Dollard, Southfork, Eastend, Ravenscrag and at a few points to the north, west and south of these points. At Shaunavon the main seam averages 10 feet in thickness to the north of the town and 6 feet to the south of the town. The seams worked all lie close to the surface and in some areas there is considerable coal which can be mined by stripping methods.



"UTILIZATIONPRODUCTION

Of the 100 active mines in the Province, thirteen are shipping mines, mines shipping coal over railways. All the rest are small waggon mines supplying local markets. The thirteen shipping mines are all located in the Souris Coal Field, in the vicinity of the towns of Estevan, Bienfait, Shand and Pinto. (Of the shipping mines two are much larger than the rest and produce more than seventy per cent. of the total output of the Province).

Production figures from 1890 to 1943 show that the history of the coal mining industry in the Province has been one of steadily increasing production. Annual production has more than tripled since 1928 and indicates the growing popularity of Saskatchewan lignite.

This increase in the popularity of lignite has been brought about by the introduction of better and more efficient burning equipment, better preparation of the coal at the mines by sizing and screening and a growing conviction on the part of the consuming public that lignite is an economical fuel compared with other fuels over a considerable portion of the Saskatchewan and Manitoba market.

SASKATCHEWAN COAL PRODUCTION

<u>Year</u>	<u>Short Tons</u>	<u>Year</u>	<u>Short Tons</u>
1890	200	1929	580,189
1895	15,769	1930	557,939
1900	40,500	1931	658,902
1905	107,596	1932	887,953
1910	181,156	1933	927,343
1915	240,107	1934	909,288
1920	335,222	1935	919,477
1921	335,632	1936	984,778
1922	382,437	1937	1,049,348
1923	438,100	1938	1,022,166
1924	480,966	1939	960,000
1925	469,686	1940	1,097,517
1926	451,077	1941	1,322,763
1927	472,182	1942	1,301,116
1928	464,428	1943	1,664,207
		1944	1,393,092





PRODUCTION BY DISTRICTS FOR THE CALENDAR  
Years 1942 to 1944

<u>District</u>	<u>1942</u>	<u>1943</u>	<u>1944</u>
Estevan	1,231,193	1,662,140	1,367,527
Assiniboia	30,510	30,662	18,604
Shaunavon	<u>9,279</u>	<u>11,405</u>	<u>6,961</u>
	1,270,982	1,664,207	1,393,092

EXPORTS, IMPORTS and COAL AVAILABLE FOR CONSUMPTION  
for the calendar year 1942

<u>Output</u>	<u>Rec'd from other Provinces</u>	<u>Shipped to other Provinces</u>	<u>Exported</u>	<u>Imported from U.S.A.</u>	<u>Coal available for con- sumption</u>
Bituminous	80,713		283	773	81,203
Sub-bituminous	33,761				33,761
Lignite	<u>1,301,116</u>	<u>1,168,778</u>	<u>685,898</u>	<u>2,337</u>	<u>5</u>
	1,301,116	1,283,252	685,898	2,620	778
					1,896,628

SASKATCHEWAN LIGNITE IS NON/COKING

Lignite has no coking qualities and therefore cannot be used for manufacturers where a coking coal is required."

(That, Sir, is one of the disadvantages of our particular type of coal so far).

(Continues brief)

In spite of its low heating value compared with the higher grade fuels of British Columbia and Alberta, Saskatchewan lignite is an economic fuel over a considerable portion of the Saskatchewan and Manitoba market. Centers as far away as Moose Jaw, Regina and Winnipeg burn Saskatchewan lignite for a considerable proportion of their fuel requirements. Approximately one-half of Saskatchewan's output is consumed in Manitoba.

Saskatchewan can be divided into three coal manufacturing zones. In the southern portion of the province is a zone in the vicinity of the lignite mines, where lignite is the only coal used. In the western and northern portions of the Province, Alberta coals hold the market. In between these two is a central zone including Regina and Moose Jaw extending eastward to include the Winnipeg market, where both Alberta, British Columbia and Saskatchewan coal



is sold.

BURNING EQUIPMENT

The principal requirements of a stove or furnace to burn lignite successfully are ample fire box capacity and grate area. Since the heat value of lignite is less than that of older coals the weight or volume required to maintain the room temperature for a given time must be proportionately larger. Lignite on being heated breaks up into relatively small fragments, therefore a grate having small holes or one of the non-sifting type, should be used to prevent the loss of unburned coal through the grate.

In larger, low pressure heating plants in apartments and smaller public buildings, the combination of non-sifting grates with automatically controlled forced draft has produced satisfactory results and in many instances has permitted the substitution of lignite for higher priced fuels with a definite saving in cost. Progressive improvements in the technique of making more effective use of lignite as a fuel will provide a steadily increasing demand for this class of coal.

In larger power plants, with properly designed boiler settings and mechanical stokers, good efficiencies are being obtained with lignite."

BY MR. PHELPS - I may say that at one time there was quite a controversy with larger companies using larger boilers. They maintained that they could not use our lignite satisfactorily, but that has been entirely disproven now.

BY MR. FRAWLEY - That word "good" is perhaps a little modest. I understand you have displaced Alberta coal in certain large installations in the City of Winnipeg, which are now using Saskatchewan lignite successfully.

A. quite correct. Perhaps we are a little modest. And it is so in the Province of Saskatchewan, we have found the same to exist. We have been able to make a conversion that in some cases increased efficiency so far as that particular operation is concerned.



"IMPROVED OR PROCESSED LIGNITE"

A complete discussion of coal utilization by improving or processing to recover the many by-products contained would fill volumes and can only be briefly commented upon here. Many articles have been written, often based on unsound reasoning, describing in glowing terms the products that can be obtained from coal and the uses to which they can be put, but giving little thought to available markets for the fuel and other materials to be produced or the economic factors involved. Other writers have advanced arguments in support of the contention that the greatest hope for coal processing industries lies in their value as auxiliaries to the main means of utilization, that is, the mining and sale of raw coal.

An intermediate conclusion is probably closer to the truth and may be expressed by stating that while processing does not offer an immediate solution to our coal problems, the ultimate solution is very likely to lie in some processing method. If this is true, every effort should be made to further the study and research into all phases of coal processing. Much of the experimental and research work involved is of National rather than Provincial scope and should be financed largely from the National Treasury.

The Dominion Government has undertaken considerable coal research in the past. This work should be continued and expanded. A far sighted policy and program should be inaugurated in which the coal producing Provinces as well as the Dominion should have a part.

The following are the chief methods so far advanced of treating coal either to improve its handling and heating qualities or for the recovery of by-products.

1. DRIED LIGNITE - for use in automatic stokers and fuel gas producers, and, when pulverized as a powdered fuel.

Most experts agree that the practical limit of moisture reduction is to the point where the moisture content of the coal is in equilibrium with the moisture in the air. Saskatchewan





lignites contains at least thirty per cent moisture and air contains from sixteen to twenty per cent moisture depending upon the relative humidity. Reduction of the moisture content of the fuel below the equilibrium point results in a re-absorption of moisture from the air. the re-absorption is a heat generating process and may be sufficient to start spontaneous combustion during transit or in storage.

Dr. E. P. Schoch of the University of Texas, has worked out a process whereby Texas lignite can be dried in an oil bath with or without later heat treatment to remove the absorbed oil and part of the volatile gases. It is claimed that the product will not re-absorb an appreciable amount of moisture from the air on exposure. Such a process would permit the removal of perhaps twenty-five per cent of the moisture from Saskatchewan lignite, but the oil drying process would add to the cost of preparation. No information is available on the economics of the process.

2. DRIED LIGNITE BRIQUETTES

The dried lignite in No. 1 can be briquetted with the addition of a suitable binder and treated to prevent re-absorption of moisture thus producing a fuel more nearly equalling the higher grade Alberta coals in heating value. The briquettes would not be suitable for use in the greater portion of the industrial market but would be limited to domestic and smaller hand fired heating installations. Domestic users would buy the briquettes even at a slight additional fuel cost on account of the greater convenience in handling. A combination of uses of one and two might have possibilities particularly if the dried lignite could be used in a market close to the mines for gas production or power purposes and the dust and fines resulting from drying briquettes and sold for domestic use. In this way every pound of lignite mined would be used."

BY MR. PHELPS - I might add at this point, even since this report has been compiled we have had certain further investigations in that field with a view to utilizing a lot of our waste



for the generation of fines. I might also add that during the past few months I have had numerous requests and telephone calls in regard to many people who could not be supplied with briquettes. We have a plant operating but they are unable to supply the demand, but we feel that there is a definite need and market there.

(Continues brief)

3. CARBONIZED LIGNITE

If the drying process is carried still further carbonized lignite is produced, a high grade fuel suitable for use in power gas producers and powdered fuel plants. Very little has been done to develop the use of lignite char by any other method than by briquetting.

4. CARBONIZED LIGNITE BRIQUETTES

The char resulting from carbonizing can be briquetted and made into a suitable fuel with relatively high heating value. Briquetting limits the market for the briquettes to the domestic market as distinguished from the industrial market.

Carbonized lignite briquettes are now being produced at Bienfait, Saskatchewan, and sold in competition with the best grades of Alberta coal. The briquettes are proving a satisfactory fuel and present production has not been sufficient to satisfy the market demand. The briquettes have good storing, transportation and burning qualities and are convenient to handle.

The only by-product disposed of in the manufacture of briquettes in the Saskatchewan plant is creosote, which is marketed in Prince Albert, Saskatchewan, where it is used as a timber preservative.

The production of briquettes by the presently operating company is shown in the following table:-

1937-38	14,000
1938-39	33,931
1939-40	36,000
1940-41	49,000
1941-42	69,294
1942-43	30,000
1943-44	56,159





Every ton of briquettes manufactured represents a raw coal production of two tons.

(In other words it takes two tons of raw coal to make one of briquettes).

(Continues brief)

The briquettes have a heating value of approximately 13,000 B.T.U. per pound and 5 gallons of creosote are obtained for each ton of briquettes manufactured.

The Industrial Development Branch of the Department of Natural Resources is studying the economics of the manufacture of the lignite briquettes with a view to the possible establishment of further briquetting plants in the province."

BY MR. FRAWLEY - Before you go on with the next, are you dealing anywhere in this brief with the starting of that briquetting operation, as to who built the plant, and how it passed from hand to hand, and so on?

A. Yes, a little later on here. We will be right into it in a moment.

(Continues brief)

5.

BY-PRODUCTS

The usual crude products from the distillation or carbonization of coal are: gas, light oils, ammonia salts and tar or pitch. One of the chief drawbacks to a greater use of lignite by carbonizing has been the absence of markets in which to dispose of the by-products. There is no market for the gas at present. Gas from lignite could be used in a clay product plant for firing kilns and the Provincial Government has in mind experimental research, in this direction."

(We feel that that is a very useful field for research).

(Continues brief)

Producer gas generated from North Dakota lignite, which is similar to Saskatchewan lignite, has been used for burning brick in a chamber kiln at the Hebron Brick Company at Hebron, North Dakota, for the past twenty years.



The tar oils and crude spirit at present have value only as fuels which have to compete with similar products derived from crude oil. A limited market for creosote oil has been found in Saskatchewan in the wood preserving industry. The commercial liquor obtained cannot be sold in competition with synthetic ammonia.

6. LIQUIFICATION, HYDROGENATION and RELATED PROCESSES

Great strides have been made in the conversion of coal in Germany and Great Britain. The development in these countries was forced by a lack of supplies of crude petroleum. In Canada these methods of producing oil and its refined products will become increasingly important as the reserves of crude oil available to us diminish. In the meantime, Canada should be preparing itself against the day when petroleum supplies begin to show exhaustion by keeping abreast of research and development along these lines elsewhere.

The elimination of waste is one of the most important functions of the engineer, and in the combustion field, it involves the use of local fuels to the best advantage. When combustion apparatus is only suitable for fuels transported from a distance, the waste by neglect of natural resources is obvious. Only where it is commercially unsound to use local sources of energy, is the transportation of fuels from outside defensible. Frequently, this difficulty is due to the scale of operations, or to lack of co-ordination. Central heating plants, for instance, can use successfully much poorer fuels than is possible with small isolated units, and their potentialities as yet have hardly been touched.

RELATION BETWEEN PRODUCTION AND RESEARCH ORGANIZATIONS,  
either Government or Industry

The Province of Saskatchewan has in the past spent considerable sums of money in campaigns to popularize Saskatchewan lignite and in actual research to discover new uses. As early as 1912, R. O. Wynne-Roberts was employed to make an investigation into the coal and power possibilities of the Province.



Very little experimental work was done during this investigation. The resulting report consisted largely of data and information of the use of coal for power development.

In 1914 an investigation into the carbonizing and briquetting of lignite was made for the Province by Mr. S. M. Darling. This work was almost experimental and included the construction of experimental carbonizing ovens at Estevan, Saskatchewan, and various coal testing experiments in coal using equipment in the United States."

(Now we are coming to the question that was asked in regard to the work that has been done in the matter of processing lignite.)

(Continues brief)

From 1918 to 1924 Saskatchewan, the Dominion Government and for a time the Province of Manitoba carried on lignite research work, the Provinces each contributing a quarter share and the Dominion the remainder of the costs. The research body was called the "Lignite Utilization Board of Canada". A complete report of the Board's activities from 1918 to 1924 was issued in printed form entitled "First General Report of the Lignite Utilization Board of Canada - 1924".

The work of the Board successfully demonstrated the feasibility of carbonizing and briquetting Saskatchewan Lignite and culminated their experiments by erecting a briquetting plant of commercial proportions near Bienfait, Saskatchewan. As this was the main objective of the Board, it was considered that the cost of the research was justified. It was not the intention of the then existing Government to go into the commercial production of briquettes so the plant was turned over to a private company under an agreement to carry on the manufacture of briquettes."

BY MR. FRAWLEY - If we wanted that Agreement, Mr. Phelps, you could let us have a copy of it?

A. Certainly, the Agreement and the Report as well.

Q. We have the printed report.

A. The Agreement you want then, yes.





(Continues brief)

"There followed a long period of partial successes and failures resulting in re-organizations until finally after much remodelling and plant changes, the present owners, the "Dominion Briquettes and Chemicals Limited" are successfully operating and placing upon the Saskatchewan and Manitoba markets a good quality briquette which is held in high favor by the consuming public."

BY MR. PHELPS - I want to point out that I have had so many favorable comments from those people who want to secure more of this particular product.

(Continues brief)

"Saskatchewan's contributions to the total of approximately \$1,000,000 spent by the Board were as follows:

1918-19	\$20,000
1919-20	80,000
1920-21	70,000
1921-22	35,000
1922-23	31,250
1923-24	<u>31,250</u>

Total.....\$267,500.

BY THE CHAIRMAN - Are those the only briquettes here, the ones that come out of this "Dominion Briquettes and Chemicals Limited"?

A. That is the only one producing commercially in the Province of Saskatchewan; to my knowledge it is, and I think it is the only one.

(Continues Brief)

"Since 1914, the Government continued to foster the more general use of Saskatchewan lignite through educational campaigns and other means. Today Saskatchewan Provincial Public Building and Power plants are burning lignite wherever it is economical to do so. In 1943 of all coal used in buildings owned or controlled by the Province 44,057 tons was Saskatchewan lignite and the remaining 13,885 tons was Alberta coal. There can be little doubt but that the efforts of the Government have



contributed in no small degree to the more general use of lignite.

In 1930 certain coal mining operators in the Estevan field secured the services of Mr. R. L. Sutherland, a combustion engineer, to promote the use of lignite. The work of this engineer proved particularly successful. By presenting to industrial users of coal in convincing style, the economies to be obtained by using Saskatchewan lignite he was able to get many consumers to adapt their plants to the efficient burning of lignite. He was also able to convince a fair proportion of those contemplating new installations with the result that proper lignite burning equipment was installed at the outset."

BY MR. PHELPS - In addition to that I would add that recently, in the last two weeks, we have been conducting experiments in one of our own Government owned plants in Saskatchewan, with a view to determining the economics, having in mind the freight rates; we are using Alberta coal there and we want to know if we can use our own lignite.

BY MR. FRAWLEY - Do you use lignite as mined, or briquetted?

A. As mined. The briquettes are sold, I think almost exclusively, for the domestic market.

Q. Did you have to change any installation?

A. Some of them. It is customary now when we are buying equipment, and has been for some time, to keep in mind these various types of fuel, and it has been the program to buy equipment that can be converted to various uses. By the way, if you have the open type grates, then it has been found that our lignite coal is apparently not suitable.

Q. When you find you have not a suitable installation, you have to choose between using other coal or changing the set-up?

A. That is right.

Q. What has been the policy?

A. That is a matter of studying the whole economics of it again, and in some places you have to replace your equipment, and then you have to study to instal the particular type which can be made applicable to use the lignite coal.





Q. Do whatever the dollars and cents tell you to do?

A. Yes, the economics are the final determining factor.

(Continues brief)

"COAL OWNERSHIP

All the active mines and the greater portion of the best coal lands in the Souris Valley coal field are contained in a block comprising 103 sections and covering in part townships 1 and 2 in ranges 6, 7 and 8 West of the 2nd Meridian. At the time of the of the transfer of Natural Resources from the Dominion to the Province on October 1, 1930, the rights to the coal in the Souris Valley field had been largely alienated from the Crown through subsidies to Railway Companies, land grants which did not reserve mineral rights made to the Hudson Bay Company, through patented lands disposed of without reserving the minerals to the Crown and by direct mineral sales. When the Province gained control of its resources, of the 65,920 acres contained in the block above referred to, the Crown obtained the coal rights on 26,530 acres or 40.3% and coal rights on the remaining 39,390 acres or 59.7% had been alienated.

During January and February 1945 a search of the mineral titles in the area under discussion revealed the present ownership to coal rights as set out in the following table:

ACRES ALIENATED COAL RIGHTS

Location Tp. R & Mer.	Acres Crown Coal Rights	Individ- uals	C.P.R.	Man. & Sask. Coal Co.	West Dom. Coal Co.	H.B.Co.	Total
1-6-2	3,810	4,463	1,467		1,300	480	11,520
2-6-2	2,360	820	2,240	5,800	2,860		14,080
1-7-2	2,080	800	1,920			320	5,120
2-7-2	9,120	5,280	2,880		320	320	17,920
1-8-2	3,840	1,920					5,760
2-8-2	5,320	1,880	3,520			800	11,520
	26,530	15,163	12,027	5,800	4,480	1,920	65,920
	40.3%	23.0%	18.2%	8.8%	6.8%	2.9%	



BY MR. PHELPS - I may say that during recent months a survey has been made. We had different reports from time to time, and we were anxious to know just exactly the relation of one to the other, and at some considerable expense we had a survey made and the table here shows the relationship of the various properties in that area.

BY MR. FRAWLEY - I suppose this matter of the alienation of coal lands prior to the acquisition by the Western Provinces of their resources, you know if the situation is roughly the same as in the Province of Alberta. It was all taken before a commission in 1935 and 1936. Is that now a live matter still, or has the Province of Saskatchewan resigned itself to the majority report that was made at that time?

A. I think the Province of Saskatchewan has pretty well resigned itself. We are not raising that as an issue at this time. It is on the assumption that things are as they are. We maintain that quite possibly a mistake has been made and we are prepared to make the best of it, and the Mineral Tax on page 27 of our brief is a method of agreeing with that to a certain extent.

Q. I am putting this on the record because in Nova Scotia there are no alienated lands from the crown. But in these Western Provinces of course during the 25 years of Dominion administration a lot of these lands were alienated, but there was a portion of the award at the time of the Natural Resources Transfer Commission, a portion of that award I suppose could be said to recompense the Provinces for those alienations.

A. In part. That settlement has not as yet been completed. The Dominion Government has admitted that there has been no complete settlement, and today they are paying to the Province a subsidy in lieu of the settlement, and I take it it will not come up until the war is over, but when that is over Saskatchewan intends to press for a settlement.

BY COMMISSIONER McLAURIN

Q. You have a dispute with Mr. Illsley about seed grain advances?

A. Yes.

Q. And part of this subsidy has not been paid?

A. No, the dispute in regard to seed grain is not mixed up with





the subsidy that is to be paid in lieu of the alienation of natural resources. The dispute is in regard to the amount paid under the Dominion-Provincial agreement.

BY MR. FRAWLEY - The Saskatchewan Natural Resources Commission report contained a minority judgment of Mr. Justice Brightman. Do you recall how many millions he thought should be awarded to the province of Saskatchewan?

A. No, I don't. I have read the report, but it is a very substantial sum.

Q. The majority report was Five Million, the same as in Alberta?

A. Yes.

Q. But Mr. Justice Brightman recommended the payment of some very large amount?

A. Yes, I forget the amount at the moment, but it was substantial.

BY THE CHAIRMAN - Do the provisions of your Mining Laws, are the operators who are operating mines not owned by the Crown, do they come within the purview of that legislation.

A. Oh yes, various legislation that covers all mining operations in the Province. But they operate on a different basis. We have three different classes of land; one the land that the crown still owns the mineral rights; and the land that is sold outright and is now owned by individuals or companies, some of that the surface rights have been sold but the companies maintain the coal rights; they distinguish between the two; they retain the under-surface rights. And the type of operation that is referred to here, where the Dominion Government, where the Dominion Government sold and where they receive 7¢ a ton on those sales.

Q. Has the Government of the Province the power of closing down mines for good and sufficient reasons?

A. That would include safety. Oh yes, there is power under the Act.

Q. And that refers to all coal operations.

A. As it pertains to safety and these other things, yes. The Act covers all operations in that regard.





Q. Suppose a mine was not producing coal satisfactory to the general public, or looking after their coal so that it would be of an equal quality with good domestic coals, would you have the power to close them down?

A. You have asked me a question - I believe, Sir, that under the Act that was referred to here previously, the Government of that day set up certain standards of quality; and I want to qualify that point, but I am quite sure that they set up certain regulations that would give a Government that power.

BY MR. FRAWLEY - It would not be in the Coal Mines Regulation Act, that is directed to the operation of mines as a mine.

BY THE CHAIRMAN - What I meant was, if there was any mining legislation?

A. Mr. Hastings, the Coal Commissioner, advises me that there is power under the Coal Mines Industry Act.

Q. Of Saskatchewan?

A. Yes.

(Continues brief)

"The coal rights, disposed of through mineral sales affect approximately 5,630 acres. These sales were made to individuals or companies at a sale price of \$7.00 per acre and the sale agreements provided that a royalty of ten cents per ton be paid when the coal was mined. The royalty was subsequently reduced by Dominion Order-in-Council to 7 cents per ton.

#### ROYALTIES AND REVENUE

Coal mining rights on Crown lands may be acquired by lease at an annual rental of \$1.00 per acre. A royalty of 5 cents a ton is payable to the Crown on coal mined from such leases. A royalty of 7 cents per ton is payable on coal mined from the mineral sales mentioned under the heading coal ownership."

BY MR. FRAWLEY - That was something that was referred before you took over?

A. Yes.

Q. You have carried it on?

A. Yes.

Q. As you are probably compelled to by law?



A. Yes.

(Continues brief)

"For the Fiscal Year ending April 30, 1944, royalty on Crown Leases amounted to \$5,161.20 and royalty on privately owned mineral sales amounted to \$23,675.04. Of the total production of \$1,664,207 tons mined in the Fiscal Year 1943-44 the Province received no royalty or lease rental revenues on 1,313,255 tons or 79 per cent.

The following table shows the Provincial revenue and expenditure relating to coal for the Fiscal Years ending April 30th, 1942, 1943 and 1944. The figures for expenditure do not include salary costs of administration in the head office at Regina.

	<u>1941-42</u>	<u>1942-43</u>	<u>1943-44</u>
Lease Rentals	3,096.82	2,889.32	3,106.17
Royalty	19,117.49	16,765.33	23,675.04
Application fees	53.00	10.00	55.00
Mineral Certificates	93.00	64.50	91.50
Operator's Licenses	704.00	825.00	760.00
Miscellaneous	<u>176.43</u>	<u>130.23</u>	<u>70.67</u>
Total Revenue	23,240.74	20,684.38	27,758.38
Expenditure	10,342.21	8,960.71	8,462.22

BY MR. PHELPS - I would point out the very small amount of royalty we receive from Crown leases. The majority we do get from coal as a Government comes from the 7% mineral sales.

BY MR. FRAWLEY - That reflects the extent to which there was alienation.

A. Quite true. I want to emphasize that point, that we only received royalty last year in any form on 21% of our coal. On 79% we received no revenue except in the form of license.

BY THE CHAIRMAN - Was that the extent of all the royalties that you got from your coal, that twenty-eight thousand plus?

A. Correct; quite right, Sir. That is the point I would like to get before this Commission, so far as the Province is concerned. I believe, had we had a little more time (I am





more or less new at this business), but I would like to go back over the years and see the revenue we have received as a Province from the coal since its inception; and I would think, if the services we have given were on one side, and the receipts on the other side, we would find ourselves in the red as a Province.

Q. No doubt about that, if that is all you received.

BY COMMISSIONER McLAURIN - \$267,500 was the investment in briquetting alone?

A. Yes, which we sold for one dollar. That is all we got when we sold that asset. That is a disturbing factor, that while we render services to all mines, we receive a revenue from a very small percentage of them. It is set out in the table herein.

BY MR. FRAWLEY - When your predecessors were putting large sums of money into briquetting research, you were spending general revenue?

A. Yes. The general revenues of the province have been utilized in many instances to subsidize indirectly the coal mining industry of Saskatchewan.

Q. You do own 40.3%, the Crown does control that, as appears from the table?

A. Yes. They are the fringes, by the way.

Q. Those are the rights?

A. In acres, yes. Acres are one thing; the tons are the real determining factor.

Q. I didn't realize it was so lop-sided myself. It is worse than in Alberta.

A. Yes. The table shows the amounts we have received from the various services.

(Continues brief)

"INSPECTION OF MINES"

The Province employs two coal mining inspectors whose chief function is the periodic inspection of all coal mines in the interests of the safety and welfare of the miners. No charge is made to the operators operating on Crown leases or on lands



where the coal is privately owned. In addition to safety inspections, inspectors perform whatever field duties are necessary for the proper administration of "The Coal Mining Regulations" and the "Coal Mining Industry Act" and regulations made thereunder."

BY MR. PHELPS - That is an Act we refer to, passed by the previous Government in order to try and regulate the industry to some extent. And it was partly successful.

BY MR. FRAWLEY - Of course that paragraph indicates the other side of it. You were not put to any great expense, as if you had had to inspect deep shaft or gassy mines, as in other Provinces, or you would certainly be in the red.

BY COMMISSIONER McLAURIN - If you had to do that you would have more coal.

BY MR. FRAWLEY - Yes, but not from the coal on which you have royalties. But you would still have to do it. It is your job as head of the state and not as the Lessor. Whether C.P.R. or Hudson Bay, or your own, you would have to inspect them; and if you had much to do, you would have a fine time trying to do it on the revenue you have out of this industry.

BY COMMISSIONER McLAURIN - On 20%.

A. Yes. Of course this does not include any of the administration costs of our Head Office.

BY THE CHAIRMAN - Do those mining companies that are apart from the Crown here, do any of the taxes they pay reach the Provincial Treasury?

A. Oh yes, they will pay various taxes. For instance the Education Tax will catch them, and they buy supplies; indirect taxes, but no direct taxes as a coal mining operator except that they take out a license; I mean indirect so far as the coal mining industry is concerned.

BY MR. FRAWLEY - They have to be indirect or the Privy Council will not let you impose them.



(Continues brief)

"One Inspector is located at Estevan and takes care of mine inspection in the Estevan area. The other Inspector is located at Assiniboia and inspects all the small mines in the Willowbunch-Wood Mountain and East-end Shaunavon districts.

The mines are inspected monthly as far as possible during the period they are operating."

BY MR. PHELPS - This is a new act, the Mineral Taxation Act, placed on the books only a few months ago, in an effort to meet in part the situation as outlined to you. We felt the situation was sufficiently serious that an effort should be made to meet it. It is a rather novel idea to some extent, that is it is new to this Province, and many other Provinces, and we have had to examine a great deal of other legislation for some indication, and in some cases we had no precedent at all, but simply had to take-off. We hope it will meet the situation.

BY MR. FRAWLEY - There was one in Alberta; I don't know whether yours is a carbon copy of it or not.

A. No, it is different.

(Continues brief)

"THE MINERAL TAXATION ACT

It has already been pointed out that when Saskatchewan gained control of its natural resources, the mineral rights on millions of acres had already passed from the Crown. In the case of coal in the Souris Valley Coal Field, it has been shown that the coal rights to 59.7 per cent of the best coal lands of the area were disposed of by the Dominion Government and are now held under private ownership."

BY MR. PHELPS - You might say they were given as a gift with no strings attached, no time limit, or no obligation on their part whatsoever, and in many cases these individuals and companies have retained these mineral rights, and have paid no taxes for the privilege, and although they sold the surface rights, they maintained the mineral rights and were not taxed for the privilege of retaining them.





(Continues brief)

"The Saskatchewan Government believes that the policy of allowing mineral rights to become alienated from the Crown, as followed out by Dominion authority in the past, was wrong in the principle; was not in the best interests of the people and militated against the proper conservation of the country's natural resources. In many cases companies and individuals acquired valuable mineral rights under circumstances which practically amounted to a free gift of the minerals. Once these minerals passed from the Crown there was no guarantee that they would be developed within any reasonable length of time and no provision was made at the time of their disposal to ensure that they would be developed without undue waste."

BY MR. FRAWLEY - That paragraph might very well have been left out of your brief; the same as in the Alberta brief. That was the burden of the complaint at that time that there should be some compensation in millions of dollars to these two Western Provinces.

BY THE CHAIRMAN - I think he is only showing cause why he is passing this legislation.

BY MR. PHELPS - In an effort to meet the situation and put it on a more business-like basis.

(Continues brief)

"On November 10, 1944, an Act was passed by the Saskatchewan Legislature entitled "The Mineral Taxation Act" providing for the taxation of privately owned minerals by the Province of Saskatchewan. The Act provides that every owner of minerals shall pay an average tax of three cents an acre annually on every acre of land in respect to which he is the owner. The Act further provides that areas where minerals are being produced may be proclaimed from time to time as mineral producing areas and that in such areas owners of minerals shall pay a tax as prescribed by the Act commensurate with the value of the minerals owned or being produced.



The effect of the mineral tax on the coal mining industry will be that certain areas in the Province will be proclaimed as mineral producing areas and within these areas owners of coal rights will be required to pay a tax in respect to each acre of land of which he is the owner of minerals."

BY MR. PHELPS - I would like to draw your attention, Sir, to the fact that the word "owner" is used. We are most anxious that this tax be not passed on to the producer, to the operator, and we have so worded our agreement, although there is some wording to that effect. We are anxious that this tax shall rest on the owner of the mineral rights.

BY MR. FRAWLEY - Do you think there is any hope of that?

A. We are hoping that it will be a tax directly on the owner of the mineral rights.

Q. Did your people check with the leases of the C.P.R. in Alberta, of mineral lands, to see if it was passed on there? I am speaking of petroleum and mineral gas.

A. No, we didn't check.

(Continues brief)

"In the case of coal, a tax of 50 cents an acre will be levied on each acre where no coal is being or has been mined, and a tax at such mill rate but not exceeding ten mills on the dollar, as may be set by the <sup>Lieutenant</sup> Governor in Council on the assessed value of the coal on all parcels which are being or have been mined.

#### TREND OF ACCIDENT RATE AND WORKMEN'S COMPENSATION

The Saskatchewan Workmen's Compensation Board began payment of compensation to workmen on all accidents occurring after midnight July 1st, 1930.

The assessment rate for all types of mining in the beginning was set at \$3.50 per \$100.00 of payroll. In 1932 a division of rates was made whereby the assessment rate on open out coal mining was placed at \$4.00, underground coal mining at \$8.00 and hardrock mines at \$6.00. Various changes occurred in the rates during succeeding years. The experience up to the end of 1940 showed that at existing rates the metal mines were





carrying too large a share of the total assessment and coal too small a share. In 1941 the coal mining industry, which showed at that time a deficit of some \$39,000 of compensation paid over assessment revenues, was given a classification group of its own with the intention of making the industry bear its own compensation expenses, consequently, the rates for coal mining increased and the rates for hardrock mining decreased. From a maximum rate of \$7.00 on open cut mining and \$10.00 on underground coal mining, the rates began to decrease as the adverse balance between compensation paid and assessment funds received was reduced. The rates per \$100.00 of wages for 1944 and 1945 were as follows:

	<u>1944</u>	<u>1945</u>
Hardrock Mining	\$1.50	\$2.00
Coal Mining, Open Cut	6.50	6.00
Coal Mining, Underground	9.00	8.00

By the end of 1944 the deficit shown by the coal mining industry as between assessment and compensation paid had been reduced to approximately \$1,000."

BY MR. PHELPS - Which indicates that the rate at the present time is higher than need be, but we are catching up very rapidly; although there has been new legislation passed that will operate, and possibly it may remain at its present rate.

(Continues brief)

#### "WASTE IN MINING

There is considerable unavoidable waste in mining Saskatchewan coal. A weak clay roof usually requires that considerable coal must be left as a roof support for underground mining. The presence of clay partings often prevent a more complete extraction. Shaft entry and boundary pillars, as in all coal mining operations, must be left to protect the mine workings, and to comply with mining safety regulations. The losses due to these causes may be roughly estimated as follows:



Boundary Pillar Loss	4.5% to 18%
Left in Roof or Floor	10.0% to 20%
Left in Mining	<u>27.5% to 38%</u>
Total Unrecovered	44% to 76%
Average	60%

BY MR. PHELPS - This shows that there is less than 40% of the coal actually recovered, which is a very high rate I think you will agree, of loss. We are hoping to be able to reduce that to some extent, but it naturally will be high.

(Continues brief)

"The average recovery in underground mining would be 40%. There are still other losses due to coal under railways and road allowances that must be left to protect the rights of way, coal not mined due to deterioration of the seam, presence of water, etc. These latter losses can only be estimated for the particular property affected but they do occur and still further reduce the total recovery figures for coal seams that are mined by underground mining methods.

In some parts of the Souris Valley field two seams occur, one lying at a depth of from 20 to 50 feet of the surface and a lower seam at from 80 to 150 feet of the surface. If the lower seam is mined first the upper seam cannot be recovered and is wasted. Considerable coal has been lost in this manner, as previous to 1930, there was no strip mining in the Souris Valley Field, and strip mining must be used to recover the upper seam economically. The upper seam is of poorer quality, varies considerably in quality from place to place, is not continuous, and in places lies below the depth at which operators consider economic mining possible.

Where the upper seam is of sufficiently good quality and sufficiently close to the surface to be mined economically, it should be mined first, and this is an argument in favor of a larger measure of Government control of mining operations on privately owned mineral lands."



BY MR. PHELPS - If you were allowed to go in and take the bottom seam first, then the top one is lost, and we think that is where a measure of control in the public interest ought to be exercised.

BY MR. FRAWLEY - Do you exercise that control now?

A. At the present time, no.

BY THE CHAIRMAN - That is just part of the question I was asking him some time ago.

A. No, our present legislation does not extend to that at the present time; I hardly think so at the present time; it is questionable.

BY MR. FRAWLEY - That is something you might give some further thought to and submit something supplementary on that, just as to what your powers are, and what you actually do under your powers in the way of dealing with this business of mining the lower seam.

A. We will be glad to, Sir, and we will be glad to answer any questions later.

(Continues brief)

"In addition to the low mining recovery factor there is an indirect loss due to the fact that the mining of the coal destroys the surface wholly or in part. Fortunately much of the surface so far destroyed has either been broken lands on the edges of river valleys or land of inferior quality for agricultural purposes."

BY MR. PHELPS - I understand you are going to visit the Estevan mines, and I might say that that is one of the things, where strip mining has been engaged in it destroys the surface of the land and it is left very unsightly, and it is one factor to consider the economics of.

(Continues brief)

"In strip mining the fertility of the soil is not only destroyed but the surface is left in ridges which present an unsightly appearance. The extent to which coal mining <sup>that</sup> destroys the surface and the allowable percentage of coal that may be left in the ground after mining operations have been completed





are provincial problems to which no satisfactory answers have as yet been found.

#### COAL ANALYSES

The available analyses of Saskatchewan coal have been made at various times and by numerous analysts. These analyses were not based on a uniform system of sampling or a uniform method of analyzing and therefore are of little value on a basis of comparison between coal seams in the same coal area or between coals of widely separated fields in other provinces or countries. For this reason, Saskatchewan has hesitated to publish any coal analyses until such time as analyses are available which have been compiled after systematic and uniform sampling and a standard method of analyzing used. When this work is done the coal classification of the American Society for Testing Materials should be used as this standard has now been adopted by the Associate Committee on Coal Classification and Analyses of the National Research Council of Canada and will provide a uniform system of classification for coals for the whole North American continent.

So far Saskatchewan coal has all been classed as lignite. The characteristics of lignite are a woody or earthy structure, brown colour, light volatile and moisture content and tendency to slack on weathering. Saskatchewan lignites vary considerably in the degree to which they possess these lignite characteristics. While the lignite in all areas has a high moisture content and slacks on weathering, some deposits are black in colour, show little evidence of a woody structure and more nearly approach the sub-bituminous coals than such coals as the brown lignites of Germany and Texas

#### CONCLUSIONS

1. Saskatchewan has adequate reserves of coal to supply all its present markets or any conceivable increase in these markets for a long time to come.
2. Saskatchewan lignite being lowest in the scale of heat values, does not have sufficient geographical advantage over the higher rank western coals to allow its entrance into Eastern



and Central Canadian Markets now supplied by imported coals. The Province is therefore most concerned with the development of a National Fuel Policy as it may affect the competitive position in the area in which Saskatchewan coal has a natural economic advantage over other Canadian coals."

BY MR. PHELPS - We are not asking for any special privilege but we just think it should be equitable.

BY MR. FRAWLEY - Do you not get this prepared **briquetted** coal into Ontario by subvention?

A. I understand that a very small percentage of it goes. In fact it is not necessary to ship it there, they have all the market they can supply closer.

Q. But after the war, when there may not be this large demand in Western Canada.

A. I think with the present production it is pretty well sold.

BY COMMISSIONER McLAURIN - You have only a production of 6,000 tons, and Canmore produces 20,000.

(Continues brief)

3. "In assisting the movement of coal by means of subvention to areas dependent on imported fuels for all or a portion of their fuel requirements, those coals which require the least expenditure of public funds to move them beyond their natural competitive boundaries should be given the preference.

4. Saskatchewan lignite has a natural geographical advantage in relation to a large part of the most heavily populated areas of Saskatchewan and Manitoba which make it the most economical fuel in these areas and its natural advantages in these markets should not be jeopardized through the application of subventions or other measures aimed at making Canada self-sufficient in the matter of her fuel requirements.

5. Wartime controls and assistance cannot be abruptly terminated without serious damage and dislocation of the coal mining industry.

6. If the Government of Canada is to continue subsidizing the coal industry of the Dominion, then it should be in a





position to demand that a large measure of control over the industry be placed in the hands of government to insure that public moneys used to bolster the industry is expended in the best interest of the whole Canadian public."

BY MR. FRAWLEY - But there is legislation to cover it?

A. Yes.

Q. But for a variety of reasons you have never been able to take advantage of it?

A. Not to its fullest extent. I think the argument will probably be that it is not equitable. On page 11, we feel that Saskatchewan maybe has not been getting its proper share of the present subventions, but we have not been able to participate as we might have done if there were other factors there.

BY MR. FRAWLEY - I think Canmore briquettes got in there and they are further west, and if this is a well prepared and well processed product, I was wondering why it didn't get in.

BY COMMISSIONER McLAURIN - Alberta has a surplus production, and Saskatchewan has not.

BY MR. FRAWLEY - Then why worry about Ontario?

BY MR. PHELPS - So far as briquetting is concerned, I don't think there is any worry with the present supply available. I think it is in connection with the production of the raw coal.

Q. For industrial purposes?

A. Yes.

BY THE CHAIRMAN - Does that word "subsidize" include the railway subventions that we were talking about?

A. We include that because it is part of it.

(Continues brief)

7. "The coal mining industry has a poor load factor owing to the low demand for coal during the summer months resulting in poor economy in operation and irregular employment. Every effort should be made to find ways and means to counteract the ill effects of the seasonal nature of coal mining and in this connection all methods of coal utilization should be studied and the progress of similar research and advancement



elsewhere, carefully reviewed.

In regard to the situation in the Western Canada Coal fuel area, we believe that a system of interprovincial agreements between operators backed by Dominion authority with special powers to act in case of disagreement between producers or provinces would be effective in stabilizing the industry. Such a system has operated on a Provincial scale in Saskatchewan but was unable to function properly as Saskatchewan legislation could not provide the necessary control where coal was marketed outside the Province.

9. A more effective solution of many of the problems facing the Canadian coal mining industry than that indicated in the foregoing paragraph would be the establishment of a Dominion Coal Board with wide powers to control the production and marketing of coal. It is recognized that a Dominion Board would be more effective than similar independently operating Provincial Coal Marketing Boards, but if the Dominion fails to take the lead in adopting a firm policy directed at stabilizing the coal industry, the Province of Saskatchewan will not hesitate to act on its own and take such steps either through a Provincial Coal Marketing Board or other means in an endeavor to find a solution of coal problems as they affect the coal mining industry in the Province."

BY MR. PHELPS - I want to say, Sir, that we are not holding that up as a threat at all.

BY THE CHAIRMAN - Not to us, anyway.

A. To no one. We stated in the beginning of the presentation that we are most anxious that this be done on a Dominion wide basis, and we will not do anything to prejudice it, but we are quite determined, and if all other means fail we will not hesitate to use our powers,

BY COMMISSIONER McLAURIN - Will you give us an example which would necessitate the Dominion setting up a Board?

A. I believe in the past there have been several abuses crept in.

Q. Give me a sample of one abuse you might have in mind?

A. During the time of the previous war, the legislation is still





in operation, I was not familiar with it at that time, but there was quite sufficient evidence of abuse. The abuses were so prevalent..

Q. What was one of them?

A. Price cutting.

Q. Is there price cutting referred to in the brief?

A. Yes, very briefly.

Q. You mean between your operators?

A. Yes. And a matter of the quality of the coal. Because the quality of the upper seam is of one nature, and the quality of the deeper seam is of another.

Q. That is something you would not want a Dominion Board to come in and tell you, how Saskatchewan coal is to be mined. You would be relinquishing some of your sovereignty,

A. I think if we had a representative on that Board we would be quite prepared in the national interest to go that far; because we do not think that the other parts of Canada would be anxious to do anything that would prejudice any other part of Canada.

Q. You are sitting on the top of these mines, and if you are in a position to regulate them, why don't you?

A. So far as the Province can go we would be prepared to co-operate with that Board. It is not in our opinion good business to allow different qualities of coal to be mixed in the same car. We are anxious to see that when a car is sold on a certain grade, that it meets that grade.

Q. You started talking about what people could mine certain seams, and I think you should be able to pass legislation to meet it. But when you get to the marketing, it should probably rest part with the Dominion and part with the Province, or both.

A. You are talking of the operation itself, and I take it the Provincial Legislature either does or could be made to cover the actual operation, but it is after that the Coal Board would come into its main program, as I see it.

BY THE CHAIRMAN - For example you could not go into the matter of cutting prices of your coal in Manitoba?





A. How?

Q. If six of your companies are marketing coal in Manitoba, and they start cut-throating down there as to prices?

A. You mean by Provincial Legislation that would be outside?

BY COMMISSIONER McLAURIN - It is the Drumheller operators that cut threats to sell coals in Saskatchewan.

A. We are not so much interested. We think everyone should get an equal chance, but we would like to see a Dominion Policy worked out, whereas a fuel in a certain area where it is most economical to use it, that it should be protected and encouraged to be used in that particular area; but we are not asking that our coal be subsidized to the extent of going into some else's area.

BY MR. FRAWLEY - If the marketing gets out of hand and there is cut-throating, it does re-act on the mining operation. You say that that can be done properly by a Dominion Coal Board with obvious powers of interprovincial marketing?

A. Yes, and in the light of experience of previous governments when they went into other provinces until they gained control, that kind of business, and therefore that is one of the reasons why we think that in the interests of the coal industry as a whole, it would be better to have it in the way we suggest.

Q. But you say if the Dominion does not do that, you will set up an organization through which the coal would have to be marketed?

A. Quite true.

Q. Like the British Columbia apple boards?

A. Quite true.

BY COMMISSIONER McLAURIN - You might have a little difficulty with that. An economic process would be pretty good and seems to be doing a good job in chasing Alberta coal out of Manitoba.

BY MR. FRAWLEY - They get cheaper coal, and why not?

BY COMMISSIONER McLAURIN - It lets the best man win. That is the economics of it. You might get something out of an interprovincial board.



BY MR. FRAWLEY - The Apple Boards are permitted to control effectively and practically the export business in apples.

BY COMMISSIONER McLAURIN - But it is not a case of an Apple Board in Alberta getting British Columbia apples and controlling it.

BY MR. FRAWLEY - But if it can be controlled, then the export of the Estevan coal..

BY COMMISSIONER McLAURIN - The Privy Council might have been entirely different if it had been a case of the control not being exercised until you transported the apples.

BY THE CHAIRMAN - According to Nova Scotia it is a poor product in any case.

BY MR. FRAWLEY - Are you speaking of Estevan coal?

BY THE CHAIRMAN - And apples.

BY MR. PHELPS - We feel that unless some organized effort be made to control the coal industry, past experience would indicate that it is inevitable that it will get into difficulties. It back-fires and creates a labour problem, and therefore as a Province you cannot shirk the responsibility, and naturally it certainly comes within the jurisdiction of a province in that regard. I don't think we will be concerned about the constitutional end of it at this particular time.

BY COMMISSIONER McLAURIN - You have to be some time. When you begin to think about legislation you have to think whether it will be *intra vires* or *ultra vires*. Mr. Phelps is quite right, if the Dominion won't do it, I think a Provincial Board would be a most effective substitute.

BY MR. PHELPS - Certainly our responsibility does not cease when we have seen it raised to the top of the ground. I don't know where one leaves off and the other begins. If you follow it from its resting place to the surface.

BY COMMISSIONER McLAURIN - There is a case to be made out for a Dominion Board because you have coal all over the country and if you have a Dominion Board you can control the whole thing. If you start with a Provincial Board you only have partial control and it might do more harm than good.





BY THE CHAIRMAN - They don't say what they will do with a Provincial Board. It might be most effective for the Saskatchewan Government to take over the mines and control them.

BY COMMISSIONER McLAURIN - As they have to import more coal than they produce, they are not in the same position as Alberta.

BY MR. PHELPS - If we had a Marketing Board, those that wanted to sell might be anxious to sell through the Marketing Board. However, that is out stand. We would much prefer it. And we felt we knew that you wanted our views and the facts, and no use of our pussy-footing about this thing, and we want to say that our first need is a Dominion Marketing Board. We think it will more nearly meet the requirements; but failing that, we feel that we would have to take some steps in our own interests.

(Continues brief)

10. Canada is not the only country faced with a coal problem. In England recent press reports state that in that country miners' representatives have been campaigning for nationalization as the only means of modernizing the industry, increasing production and lowering coal prices. A less drastic solution is advocated by Robert Fret, Chairman of the Mining Association of Great Britain who suggests the formation of a coal board, whose decisions on all undertakings affecting the industry must be binding on all operators.

11. Coal is a strategic mineral in peace as well as in war. The coal mining industry plays too important a part in the industrial life of the Dominion to permit of further deterioration in the present unhealthy state of the industry. A partial collapse of the coal mining industry can only lead to a weakened national economy.

12. Since the continued development of the coal mining industry in Saskatchewan depends on the discovery of new uses and new techniques and upon a progressive expansion of markets outside the boundaries of the Province these facts must be recognized and made to fit into whatever National policy is established."



BY THE CHAIRMAN - I want to thank you on behalf of the Commission for the courtesy with which you treated us this morning, and also for the very frank methods which you took to bring your views before this Commission.

BY MR. FRAWLEY - Would you supply a supplementary statement showing how much money you spent; you have a paragraph on it on page 27 of your brief. And in that same statement a little more detail as to the work that these Inspectors do. I want it for comparison with similar work that is going on in the other provinces, where of course there is a great deal more of it.

A. We will do that.

BY COMMISSIONER McLAURIN - Is there not one other thing we need? I am not satisfied with what this says of the Saskatchewan reserves. They took that old 1913 figure which has been shaved in Alberta by more than half. I realize the question of reserves is difficult, but is it not possible to say a little more than that some geologist in 1913 gave is billions of tons, and Alberta is still high if you cut that in two. That estimate made that long ago is valueless almost for present day purposes, of reserves, and if you can be just a little more specific as to what the reserves are.

BY MR. PHELPS - I will agree with you entirely. It has been one of the things that is most indefinite, and I feel an effort ought to be made to get a closer estimate. There is a method by which you can come much closer and bring that information up to date, and I think we ought to have that in order to map out a long range program of coal.

BY COMMISSIONER McLAURIN - Can you very shortly give us something more specific than you have. It won't be a final figure. Can the Government not confer with the operators, and from their present knowledge give us something more specific now than you have given us.

A. We will do our very best, but in the past few months we have been conducting a survey of, first who owns the rights, and in the past few weeks we have been doing some work for the purpose





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of assessment, which as we build up the records we hope will give us some more information about the depths of seams, etc.

BY COMMISSIONER McLAURIN - And perhaps you will be able to give us a better estimate than just cutting the 1913 figure in half.

A. We will be glad to do so if we can, but we didn't think our figures were near enough to give you as a factual document at this time, but if we can do anything like that we will do so. We appreciate the hearing which you have given us, and I will be available during the afternoon, or during the Sittings if you need me further.

12:55 P.M. HEARING ADJOURNED UNTIL 2:15 P.M.

2:15 P.M. HEARING RE-CONVENED

Mr. Robert McKay takes the stand and submits a brief, which is marked:

Exhibit No. 145 - Submission of Saskatchewan  
Federated Co-Operatives  
Limited.

Mr. McKay then reads Exhibit No. 145, as follows:

"Saskatchewan Federated Co-Operatives is a Co-operative Wholesale Organization in the Province of Saskatchewan, which until a few months ago operated under the name "Saskatchewan Co-operative Wholesale Society Limited". It took over certain trade connections and business activities previously carried on by the Trading Department of the United Farmers of Canada (Saskatchewan Section) which organization was originally known as the "Saskatchewan Grain Growers Association".

This information is for the purpose of clarification and where the name "Wholesale Society" or "Wholesale" is referred to, this means the organization now known as Saskatchewan Federated Co-operatives, and where the term "Grain Growers" or "Trading Department" is used, this shall signify the Trading Department of the United Farmers of Canada (Saskatchewan Section).

In the initial stages of co-operative distribution





in the Province of Saskatchewan, a start was usually made with Bulk Commodities that could be split up amongst a small group of people direct from railway cars and without the necessity of providing storage or a continuous service. This, from the point of view of the consumer eliminated what appeared wasteful and uneconomical services, and resulted in most instances in substantial savings.

Coal being a commodity generally used in many districts and carlot shipments being of such size as to be easily distributed amongst a comparatively small number of people, was a commodity simple to handle and soon became very widely distributed by Co-operatives.

The urge for this phase of co-operation arose from the demand of numerous farmers, expressed through the medium of Locals of the Farmers' Educational organization, the Saskatchewan Grain Growers' Association as it was then known, and crystallized into action at many points where the membership was strong and active.

Co-operative distribution as it relates to coal had its start in the Province of Saskatchewan, possibly around 1913 or 1914, and has been carried on since with varying success. As with most other commodities at that time the margin between Wholesale cost and Retail selling price was wide, two or three dollars a ton being a common spread. This, together with a desire for co-operative action that was then in evidence, coupled with the fact that coal being a seasonable commodity and comparatively simple to handle, resulted in a substantial demand for this type of service developing very rapidly.

At the time this type of distribution was initiated the prevailing practice of the Mining Industry was to sell coal at a more or less standard wholesale price, allowing the Wholesale Agencies a substantial commission for the services rendered. The Saskatchewan Grain Growers' Association, in order to provide its Locals with service and having in mind the volume that could be distributed co-operatively, made arrangements with various mines



and acted as the Wholesale Agency for the retail Co-operatives, and for the purpose of rendering a general wholesale service on coal and various other commodities, a department was set up and operated as a separate entity and known as the Trading Department of the Saskatchewan Grain Growers' Association.

Up until recent years approximately the northern half of the populated part of the Province used wood almost exclusively as fuel, which restricted the distribution of coal to the Southern half, with considerable quantities of wood also going into the South part when wood prices were favorable. Sources of supply were largely Drumheller and Lethbridge, and what was known as Double Screened Lump was demanded almost entirely.

In the early years co-operative distribution was very largely made directly from Railway cars and only in a comparatively small number of instances were coal sheds provided. From the point of view of consumer alone, direct distribution from cars was a very satisfactory and economical method and resulted in substantial immediate savings, but from the point of view of the dealer, the operator, and miners and the transportation companies, this type of distribution was anything but satisfactory and created opposition and in some instances open antagonism.

From the dealers' point of view it was looked upon as unfair competition and an attempt to skin off the cream of the business, leaving the less desirable business and the responsibility for future service with the equipped dealers.

From the Mine Operator's point of view off-car business being seasonable in its nature and usually confined to a brief period in the late Fall and early Winter, did not make for profitable mining operations and therefore was not looked upon with favor by many Operators, and as this particular type of demand came during the heavy movement of grain it aggravated the already difficult problem of the Railways.

The Coal Mining Industry, until recent years, was





largely a seasonal operation and of necessity did not provide steady employment for the Miners, so that anything that tended to further aggravate the already unsatisfactory situation was neither in the interest of the miners nor in the interest of the industry.

The Saskatchewan Co-operative Wholesale Society, or Federated Co-operatives as it is now known, came into being in 1929 and took over the business connections of the Trading Department of the United Farmers. The Saskatchewan Co-operative Wholesale Society was originally organized by 29 Co-operative Associations with the prime objective of becoming their wholesale supply agency, but in addition to servicing its members most of the activities of its predecessor were carried on, amongst these being the wholesaling of coal. From its inception a very substantial volume of coal was handled, the greatest percentage of which was sold to Co-operatives and Local Lodges unequipped with coal sheds and for distribution direct from cars.

Coal supplies were secured mainly from the Drumheller area, direct from a number of mines that had previously supplied the Trading Department. Coal was purchased at the current wholesale prices then in effect, from which a substantial wholesale commission was allowed. Generally speaking, established wholesale prices have been adhered to by the Mines and Coal Wholesalers, although in periods of plentiful supplies price cutting was sometimes indulged in. (Wholesale prices for years 1941-45 are listed on Schedule "D" attached).

In addition to coal from the Drumheller field some coal was also secured from Lethbridge, Edmonton, Tofield, Coalspur and Estevan, but handlings have been 75% or more from Drumheller.

Shortly after the Wholesale started in business it became apparent that a stable coal business could not be built up on off-car or "Snowbirding" as it was termed by the established trade, and encouragement and financial assistance was given by the Wholesale to Co-operatives to equip themselves with sheds



for coal storage. This action was speeded up to some extent through organized opposition to Snowbirding, which resulted in some mines refusing to supply coal to other than equipped dealers, and as several of the smaller mines who had previously shipped a considerable amount of coal were closed down for one reason or another, it became imperative, if Co-operative distribution was to continue, that sheds be erected.

Co-operative distribution of coal has been expanded during the past ten years and whereas ten years ago possibly 80% of the coal supplied by the Wholesale was distributed to the consumer by Co-operatives not equipped with coal sheds, today practically all coal is sold by Co-operatives owning coal shed facilities, and for the past four years the annual sales have averaged approximately 130,000 tons a year.

Total sales of fuel, coal and wood, for the years 1929 -1944 are shown on Exhibit "A" attached. The records of the Wholesale were not set up originally to show coal and wood sales separately, nor was a record of coal tonnage kept so that only the combined dollar volume is available. Schedule "B" shows the sales by months in carlots of coal from the main supply areas and the totals for each of the past four years.

Representations by Retail Co-operatives will undoubtedly give detailed information with regard to retail prices, margins and competition, and it is not necessary here to labour these angles. Mention was made earlier to financial assistance given for the erection of sheds. This was given under certain definite terms and conditions, the Wholesale retaining ownership of the sheds controlling to some extent the price and sales policy, and for a time the coal business was on a consignment basis and a uniform retail spread of \$1.00 per ton was strongly recommended. This, generally speaking, was adhered to and has become the recognized spread at most points where coal is taken out by the Consumer. Where delivery is made by the Co-op to urban customers the margin is, of necessity, sufficiently higher to take care of this additional service.



As the Co-operatives became soundly established the ownership of the facilities was vested in the Locals, and the majority of them have become self-financing."

BY MR. FRAWLEY - Would you explain that \$1.00 again, Mr. McKay; split between what?

A. Between the wholesale laid down price.

Q. Between your clients and the local Co-operative through which it is sold, is \$1.00?

A. Yes Sir, cost and their retail, the difference is \$1.00.

Q. The Local's retail is \$1.00 over what they pay?

A. Yes.

Q. What is the difference between what you pay at the mine and what you sell to the Local Co-operative?

A. That varies. In other words, what is the wholesale commission we get.

Q. Yes?

A. From five to ten per cent.

Q. Don't you buy the coal at the mine?

A. The Mines have what they call a standard wholesale list, that today is \$5.15 at Drunheller, and from that certain wholesale commissions are allotted to the Wholesale by the Mine off that price, and those vary with the Mines and with the service given.

BY COMMISSIONER McLAURIN - And with the purchaser?

A. Yes.

Q. What you do as well as the Occidental?

A. I don't know what they do.

BY MR. FRAWLEY - Why would you do business if you didn't do as well as the Occidental?

A. We do business our own way and they do it their way, and we don't want them nosing into our business, and we leave them to run their's.

Q. You call it a commission. You buy it, and it is your coal from the time it leaves the mine?

A. Yes.





Q. It is a discount off of the list price?

A. In the trade it is called a wholesale commission, and it is 5 or 10 per cent between their list and what we get.

Q. Why do you get 79% of your gross from Drumheller, and only 7% from Saskatchewan?

A. That depends upon the location, geological conditions. You cannot move any commodity uneconomically. In other words a Saskatchewan coal could go east probably quite a long ways, but it cannot go west until the cost goes up and meets the competition in Lethbridge.

Q. You take the Drumheller on the Moose Lake line?

A. You can go with the wind a long way depending on the quality of the product; but you can't buck the wind.

Q. And your Co-operatives would be situated along that line between Drumheller and Saskatoon?

A. All over the Province.

Q. Suppose you had them in Estevan, you would not be putting it down there as you get it?

A. If we could get it, they would sure take it. We have even shipped to the Government in the City of Estevan, Drumheller coal on a government order for Estevan.

Q. And I am told there is some of it goes to Kootenay on Vancouver Island in the shadow of Dunsmuir Ltd.

A. I don't know about that, but I do know this other.

(Continues brief)

"Where the business was properly handled, other than the initial cost of the facilities, little capital was required to finance the business either by the Local or the Wholesale. The mines as a rule were quite prepared to sell on 30 day terms, which meant that in most instances the coal could be sold, and paid for by the retail customer before payment was due the mine, and only where credit sales were made or inventories carried was any material finance required. At the present time Federated Co-operatives does business with some 327 Co-operatives, practically all of which are equipped with sheds and permanently



in the coal business.

Wartime restrictions have prevented further expansion of retail outlets, but with the removal of these restrictions it is in every way likely that there will be a very substantial increase in co-operative distribution of coal. This can be expected mainly in portions of the Province that previously used wood as fuel, and as already Co-operatives are established rendering service in other lines, it is only logical that a fuel service will be added when conditions warrant and supplies are available."

BY MR. FRAWLEY - Do you mean to say you cannot open up a new company without going to the W. P. T. B.?

A. Until recently.

Q. They regard a Co-operative as just another retail outlet?

A. Yes.

Q. You could not persuade them to the contrary?

A. We have not tried very hard because we didn't have the coal.

Q. Do you own a coal mine in the Drumheller field?

A. We think so.

Q. That might account for the 79%?

A. Oh no; that was only a recent purchase. I don't want to appear to be sarcastic. We bought the mine in liquidation, and there was an appeal made to the Appeal Court, which was dismissed, and we have been advised that it is to go before the Supreme Court of Canada, and that is why I said "we think so".

Q. What was that?

A. Empire mine. We also have a half interest in the Hy-grade, but that is mentioned later on.

(Continues brief)

"Future Prospects. In the Province of Saskatchewan coal as a fuel is likely to be in increased demand as time goes on. Wood, which at one time was a strong competitor of coal, is passing from the picture, as available supplies close to rail are now practically exhausted, and on the basis of present prices as compared to coal its use cannot be justified from an





economic angle. Prior to the war the use of fuel oil made some inroads into coal sales in certain districts, more especially adjacent to the Oil Refinery points of Regina and Moose Jaw, and undoubtedly after the war will again be a factor, but apart from its convenience as a fuel, it is doubtful if its use can be justified from the point of economic heating."

BY MR. McKAY - I should qualify that and say "other than in those immediate territories adjoining their findings".

(Continues brief)

"Natural gas, in this Province, has not as yet been used to any great extent as a fuel for heating or cooking, but should substantial quantities be later discovered, it will undoubtedly replace coal to a greater or lesser extent, more especially in the larger urban centres and others located on the pipe line from the source or sources of supply.

At one time there were some small importations of Pennsylvania Anthracite into the Saskatchewan market, but of recent years this has ceased and if heat value is taken into consideration, it would seem unlikely that there would be any future imports.

#### Change in trend in fuels

During recent years there have been changes in the type and sizing of coals used. Previously the demand was for what was called Double Screened Lump and the yardstick of value was the size of the lumps. This phase has passed and the public generally have a greater realization of what actually constitutes coal values and while at one time the smaller sizes, from Stove down, were by times a drug on the market, rarely today is any difficulty encountered in disposing of these sizes, in fact frequently the supply is inadequate to meet the demand.

Automatic Stokers are becoming popular and with a return to normal conditions there is the probability of a very material increase in sales of this type of equipment with the further possibility of a stoker being developed suitable for use in the rural homes.



Already the use of stokers has created a demand for a preparation suitable for this equipment. This demand has been sufficient to make use of the available small coal, but with the inevitable increased demand that will follow further installations, the problem of supplying the demand must be solved.

Existing price differentials on the various screenings, from the Drumheller area in particular, are unfair to the users of Lump Coal, and in our opinion there should be a more uniform price for all screened coal, as while these spreads may have been justified when the smaller sizes were hard to dispose of, this situation no longer exists and there would appear to be no reason for the continuance of an inequitable price structure.

No one can logically argue that Stoker, Nut or Egg coals cost less to produce than does Lump, in fact if present trends continue it will be necessary to crush lump coal in order to meet the demand for smaller sizes, particularly the stoker size, and when this stage has been reached the actual production cost of this preparation will be somewhat higher than in the case of Lump.

Saskatchewan Federated Co-operatives originally secured its coal requirements from the established mines in the various coal areas, and for a number of years had no difficulty in taking care of the needs of the Member Co-operatives, but as its business increased it became necessary to take steps that would ensure continuity of supplies. During the early and middle thirties several of its supplying mines were either worked out or closed down, thereby restricting to some considerable extent the coal available, and as the majority of the mines in operation either disposed of their production through their own wholesale agencies or had working arrangements with established wholesalers, it became apparent that if Federated Co-operatives was to fulfill its function of servicing its Member Associations, it would be necessary to get closer to the production end.

With this objective in mind an arrangement was entered into with Hy-Grade Coal Mining Company, at Drumheller, whereby Federated Co-operatives became financially interested in





this Company and at the same time gained control of a substantial proportion of the output of the mine. This arrangement was negotiated in the year 1941, and has proven a very valuable connection and reliable source of supply. From a financial point of view the operations have not been as successful as we would have liked to see them. This has been very largely due to a somewhat unsatisfactory seam insofar as thickness is concerned, the quality of the coal, however, has been excellent. The Hy-Grade mine is at present being subsidized by the Emergency Coal Production Board and exploratory work is being carried on to determine its future possibilities but unless the seam shows improvement there is some doubt if after the subsidy is withdrawn the Mine can continue to operate."

BY MR. FRAWLEY - Are you using the money you got from Mr. Brunning to do the exploring?

A. No, we keep on going ahead all the time, and sometimes the seam looks a little better, and sometimes not so good. There is no dead exploratory work being done.

(Continues brief)

"A few months ago, the Empire Mine at East Coulee, previously owned and operated by Empire Collieries Limited, went into liquidation and was acquired by Saskatchewan Federated Co-operatives. In the purchase of this mine the prime motive was to make provision for a continuity of supplies and with the idea of developing this mine to take care of increasing future needs. The operating experience of Federated Co/operatives has been confined to a four month period starting December 1st, 1944, and as the deal has not yet been finally completed, only an operating statement for the period can be furnished. (A copy of this is attached to this Submission and listed as Schedule "C").

In addition to the Hy-Grade and Empire connections further supplies are secured from two smaller mines in the Drumheller area, the Sovereign and Arcadia. In these instances, through financial assistance rendered, the output of the Arcadia





is made available to Federated Co-operatives and a substantial percentage of the production of the Sovereign mine.

(Incidentally those are two pretty small mines, small output.)

(Continues brief)

"The balance of the Drumheller coal distributed is purchased from other mines in that field.

Saskatchewan Lignite

Only a comparatively small amount of this type of coal is distributed by Federated Co-operatives and from past experience it would appear doubtful, if when Drumheller and other Alberta coals are available, any material increase in the sales of Saskatchewan Lignite is likely to develop.

Saskatchewan Lignite, while it has apparently given satisfaction for industrial purposes, has not met with favorable acceptance for domestic use, even in the areas where it should be the most economical coal to use, and to some extent is purchased only because Drumheller coal cannot be supplied.

In the form of Briquettes the reverse is the case, and those who previously purchased Alberta Coals are willing and anxious to get Briquettes, but as the capacity of the present Briquetting Plant is inadequate to meet the demand, sales are, of necessity, restricted.

As a result of experience in production and distribution of coal the following recommendations are made on behalf of Federated Co-operatives as being in the interests of the users of coal and of the Coal Industry:

- (a) That in future no coal leases be granted to other than actual operators, thereby eliminating speculation in coal properties. As a result of previous leasing policies many mines are now being operated on sub-leases, paying a substantial royalty in addition to the regular Government royalty, thereby adding to the cost of coal which, of necessity, raises the price to the consumer.



BY THE CHAIRMAN - You are not referring to your own Province alone in that?

A. No, I am dealing very largely with Drumheller, which is our main source of supply.

(Continues brief)

(b) Research by Governments regarding the Briquetting of low grade lignites and of the various by-products that might be derived in connection with modern methods of Briquetting.

(c) The possibility of Government assistance in the establishment of modern Briquetting Plants. There are substantial areas of low grade lignite coals in the Provinces of Alberta and Saskatchewan. These coals in the natural state do not meet with ready acceptance by the consumer, whereas in the Briquetted form they become a popular fuel. At present these coals, which as a rule lie close to the surface, are mechanically mined by stripping methods, which displaces labour, and a coal is produced rated by the buying public as an inferior fuel. If the Briquetting can be done economically, the labour factor would be restored to some extent at least, and the resultant fuel would meet with ready acceptance."

BY MR. FRAWLEY - Are your people thinking of doing any Briquetting in Drumheller of these fines that are not readily saleable?

A. No.

BY COMMISSIONER McLAURIN - Are you thinking of the possibility of Briquetting Shearneck coal?

A. I don't think the briquetting of a finely mined coal, but of a mechanically mined coal has wvery very great possibilities.

Q. Stripping coal?

A. Yes.

BY MR. FRAWLEY - What about Canmore?

A. They have a terrific amount of slack and dust, and use the





compression method, it is pressed like soft bricks, pure and simple compression.

Q. Without binding?

A. They do use a bonder.

BY COMMISSIONER McLAURIN - But they don't work on a carbonized char?

A. With carbonizing you can make an ideal fuel, but I don't know whether it can be done economically or not.

Q. They are making twice as much as they are in Saskatchewan, and selling it?

BY MR. FRAWLEY - Do you think there must be a development of the briquetting method to get rid of those fines? They say they leave 25% to 40% of it in the mine, because there is no sale for it.

BY COMMISSIONER McLAURIN - You say it costs too much to mine that coal?

A. There is no waste coal in the Drumheller area at all. Slack coal all goes to the Power Commission, and previously mines seasonally had to dump the slack, but in the slack seasons that was picked up and used, and today you will not find a pile of slack around any Drumheller mine.

Q. If there was a market for it in the "as mined" state, that would be fine. But some mines have no sale for it and they would like to leave it in the mines; they don't get enough if they take it out, per ton, and it costs more to bring it up.

A. It has to come out. It only comes out after going over the machinery, and the first slack that comes out, comes out when the coal is put over the miners' screen. That costs the operator nothing. In other words, the miner is paid after it goes over the miners' screen, and then when it goes over again there is a certain amount more which the operator does pay for.

Q. Are there any mines in Drumheller that leave coal in the mine, pillars for instance, because they can only bring it out as slack; and the pillars are left because they would be taken out as slack and there is not a suitable market?



BY THE CHAIRMAN - Is there more slack in a pillar coal that in the ordinary face?

BY MR. FRAWLEY - That is what they say.

BY COMMISSIONER McLAURIN - That is what one fellow says.

BY MR. FRAWLEY - The biggest operator in Drumheller. I raised that the other day, and Dr. Young is going to explore it.

BY THE CHAIRMAN - Is it the same as found in the face?

A. Yes, but they can't get it out as lump.

BY COMMISSIONER McLAURIN - Everyone agrees that you were completely misinformed as to the measure of fines.

BY MR. FRAWLEY - If Mr. Clarke was around that day, I would have put him on the stand. He certainly said 40%.

A. Pillar coal may not come up quite as large, and there may be a slightly greater percentage of slack.

Q. What about what comes out of the cutting and shearing machines, that is slack?

A. Yes.

Q. That certainly is not saleable?

A. Oh yes, that goes to the Power Commission.

Q. And if you cannot sell it there, you dump it?

A. Yes. But it has to come up anyhow.

(Page 2636 follows)



(d) Closer supervision of mining practices to ensure the maximum conservation of coal resources. It is suggested that mining practices followed in the past have not been in the best interests of the industry, or of the people as a whole, and have in some instances resulted in the mining out of readily accessible coal without due consideration being given to the future recovery of more remote coal that may be too expensive to mine at the present time, but which in future years may be valuable. In practically all coal fields there are extensive areas of coal that for one reason or another may not meet current demand as to quality, but which may have a future potential value. These areas as a rule have been by-passed and in a few years are no longer accessible. This would appear wasteful and should be investigated with a view to making use of the coal or protecting it for the future.

MR..MACKAY: That applies to the present time and under conditions as they exist. In competition they have been unable to take out coal that doesn't come up to a standard. That as a rule is passed up and it is lost for all time.

BY THE CHAIRMAN: If all operators were obliged to take it out they would be meeting equal competition?

MR. MACKAY: Yes, although if one man had a greater percentage than another that might be a handicap.

BY THE CHAIRMAN: We have a peculiar situation in Nova Scotia. A great large company there has in years gone by found it when it came to a certain stage too expensive, then some small company would come in, get a sublease of that, mine the coal and make a profit.

MR. MACKAY: The thought is that this coal very likely will be needed some time in the future and if any way can be devised to protect it it should be done.

BY THE CHAIRMAN: Your objection is that the way it is mined today makes it inaccessible in the future?





MR. MACKAY: Yes. The further-away coal may not be able to be mined today in competition with the other fellows, but the right-of-way into it is jimmied up.

BY COMMISSIONER McLAURIN: There is not so much of it in Alberta, is there? After all, we have got to balance our needs in the present against posterity. I find it rather difficult to worry about somebody who is going to be hurt 4,000 years from now. I would rather get it cheap today.

MR. MACKAY: Well, you have got to think about the next generation anyway.

BY COMMISSIONER McLAURIN: Yes, I say you have to balance it. We haven't had much trouble in Alberta. I mean there is so much coal, if some is left . . . I don't think there has been a great deal wasted in Drumheller, has there?

MR. MACKAY: Yes, there has been a lot of waste; a lot of coal there probably to get it out in the next 25 years will mean running a railway up on the hill.

BY MR. FRAWLEY: And we have there people who have coal that nobody wants to let them take out, up at Sheep Creek, for instance.

BY COMMISSIONER McLAURIN: There is no railway up there. Nobody else is stopping them from taking it out.

BY MR. FRAWLEY: Take it out over the dead bodies of the Western Canada Bituminous Coal Operators' Association.

BY COMMISSIONER McLAURIN: It might be the dead bodies of the people who build the railway to get at it.

MR. MACKAY continues brief:

- (c) Government action to alleviate or correct absenteeism of miners.

During the last three coal seasons, miners' absenteeism has been particularly bad and as a result has very seriously impaired the efficiency of the mines. It has also materially inconvenienced the buying public and indirectly through Government subsidies being paid to mine operators, that in many instances would have been un-



necessary had these mines been fully manned, has cost the taxpayers a lot of money. It is suggested that if the Government could enlist the co-operation of the Labour Unions it should be possible to remedy this situation.

BY THE CHAIRMAN: Aren't you the people who are in closest contact with the Labour Unions?

MR. MACKAY: We should be, but we haven't been able to solve that yet, I am sorry to say.

BY THE CHAIRMAN: You want a little outside force--no, not force.

MR. MACKAY: Probably somebody on the outside could put it more acceptably than we can. (Continues brief):

As we see it the position of the miners in the province of Alberta is far from secure, and any ill-advised action on their part might easily result in irreparable damage to their future.

Alberta underground mines, which at present producing coal that is meeting with popular acceptance, are faced with competition from mechanically operated strip mines, and while the coal from strip mines is at present rated as inferior in quality, it is not beyond the realm of possibility that improvements in burning equipment may be developed to the stage where this coal will supplant the conventionally mined coals, and undoubtedly any disruption of supplies due to strikes will act as an added stimulant to the development of such equipment.

(f) Subventions: It is suggested that should the production of the Alberta mines be greater than required to meet the Prairie demand, and should it be in the interests of our Canadian national economy that Canadian mined coal be used in Ontario or British Columbia, subventions on coal shipments to Ontario and British Columbia remain in effect as previously.





BY THE CHAIRMAN: Is that the only ground that you would ask the Government to continue subventions?

MR. MACKAY: From our point of view, from the operating point of view, we are primarily interested in our own people, and we haven't made a study of the subvention angle sufficiently great to go any further than that.

BY COMMISSIONER McLAURIN: You really use this language deliberately: "It is suggested that should the production of the Alberta mines be greater than required to meet the Prairie demand, and should it be in the interests of our Canadian national economy." You are not saying it is?

MR. MACKAY: No.

BY COMMISSIONER McLAURIN: Well, you won't get in any trouble over that. That is neutral enough.

MR. MACKAY continues brief:

- (g) Planning of future distribution from various fields.
- The yardstick of coal values from the consumer's point of view is the heating value purchased for each dollar spent. It is contended that there is a logical area in which the coal produced from each field should be distributed and a concerted effort should be made to accomplish this objective and action taken to develop and distribute suitable equipment to ensure satisfactory use of the particular coal from such area.
- (h) Planning of wholesale and retail distribution.

BY MR. FRAWLEY: Is this planning to be federal or provincial?

MR. MACKAY: In my opinion it should be the operators in the various fields that should get together on that.

BY MR. FRAWLEY: But who is going to apply the sanctions? You wouldn't leave the operators alone without some sanctions?

MR. MACKAY: We say it should be done, but how it should be brought about. . . .

BY MR. FRAWLEY: That is for us?

BY COMMISSIONER McLAURIN: I was just going to ask Mr.



MacKay for his opinion. Wouldn't you think to get the Drumheller operators together you perhaps needed a Government functionary?

MR. MACKAY: I haven't been associated with them long enough to pass an opinion.

BY COMMISSIONER McLAURIN: You have run one mine and you buying another. I think your opinion might be rather helpful.

BY MR. FRAWLEY: Do you belong to their union?

MR. MACKAY: We took it over with the mine, the Drumheller Coal Operators' Association.

BY MR. FRAWLEY: You said to me a few minutes ago that you would really have Drumheller coal in Estevan if you had enough of it to get it down there.

MR. MACKAY: I said it should not come in to Estevan but the people in the Estevan area will buy it.

BY MR. FRAWLEY: You are certainly starting with some human nature you have got to get over.

MR. MACKAY: When you are short it is a good time to do a little education. (Continues brief):

Schedule "B" shows the handlings by months of Federated Co-operatives for the past four years and a comparison of shipments for the coal season 1941-42 with shipments during 1944-45, will very clearly indicate the progress made toward the spreading of business over the year. In the season 1941-42 the operating period was practically confined to seven months, whereas in 1944-45 there was reasonably stable distribution over the entire year. This result was similar to the experience of others engaged in the business and was the result of combined intensive action on the part of the Government through the Coal Controller and the coal operators, wholesalers and dealers.

It must be remembered, however, that the fear of a shortage of fuel played a big part in arousing the buying public to a realization of the wisdom of buying as and when



coal was available, but it should also be remembered that if and when the fear of a shortage is removed, there is a very strong possibility that the public will revert to its previous buying habits unless in the meantime plans are laid to encourage buying in such form as will result in steady operation of the mines.

Wartime conditions have brought about a rationalizing of the production and distribution of coal, that under peacetime conditions would have been highly desirable, but practically impossible to bring into effect.

We submit that if properly approached by all parties interested, with the assistance of the Governments, Provincial and Federal, and the co-operation of the consumers of coal, the mining and distribution of coal can be permanently placed on a sound foundation, with practically steady employment for the miners and other employees. Efficient and economical operation will result for the operators, the transportation problem will be eased for the railways, and the users of coal should benefit, whereas if a return is permitted to previous methods, chaos would seem inevitable, with resultant unemployment, discontent and strikes.

BY MR. FRAWLEY: As far as domestic coal is concerned, and that is what you are interested in here, isn't the biggest factor the apparent refusal of the buying public to buy coal outside of the burning season?

MR. MACKAY: Yes. I think in the next clause I cover that.  
(Continues brief):

In attempting to develop a practical plan of coal distribution that will receive the support of the consumer, and without the consumers' support any plan will fail, it will be necessary to have prices sufficiently attractive during the spring and early summer months to induce the thrifty buyer to put in his supplies. A graduated scale of prices would therefore appear advisable, and where Government regulations at present set ceiling prices, or should similar





regulations be in force in future, these should be so modified that the average nett-back for the year would be fair to the operators, and further, should a graduated scale of prices be adopted, unless this is religiously adhered to, it will inevitably break down.

All of which is respectfully submitted.

BY MR. FRAWLEY: After all, the nub of that is that the consumer, the October, November, December purchaser, is going to pay a little more because you let the fellow back in March pay a little less?

BY COMMISSIONER McLAURIN: That is what they are doing now in Toronto. The man who buys his coal, as I understand it, from April to June saves 50 cents more than the fellow who buys in November, and why shouldn't he? He has his money invested and the other fellow has his money in his pocket.

MR. MACKAY: He ties up his money and he is entitled to consideration.

BY MR. FRAWLEY: Some of the mines in Drumheller are on short time today?

MR. MACKAY: No, I wouldn't say they are. Some of us are sending coal to Ontario that will be needed in this province.

Q How are you sending coal to Ontario--open cars?

A Open cars.

Q Is there much going down to that area?

A Quite a little. It just started about the time we were in Drumheller. There has been quite a considerable movement, I understand, since.

BY THE CHAIRMAN: A considerable movement into Ontario from one mine the day that I was there.

BY COMMISSIONER McLAURIN: There is probably a shortage of cars somewhere else.

BY MR. FRAWLEY: There is a shortage of cars, yes.

BY COMMISSIONER McLAURIN: Why shouldn't it go to Ontario?



BY MR. FRAWLEY: Because Mr. Neate says to me in a telegram this morning they still can't get the public to buy in spite of all urgings. Do you think that the business of sending coal to Ontario in open cars, what are the pros and cons of that? You are a Drumheller operator. Don't you think there may be more harm than good come out of moving that coal to Ontario in those open gondolas?

A I don't think it should degrade so much, but I am not in a position to say.

Q There is a shortage of box-cars?

A Yes.

Q And all that the Transport Controller can send is open cars?

A That's right.

Q So some of the Drumheller operators are sending it in open cars and others are refusing to send it?

A I don't know about refusing but I know there is nothing but open cars.

BY THE CHAIRMAN: Another complaint I found in Drumheller about the cars was that many of the cars are not sufficiently equipped to enable the coal to move freely from the car without interference. They had to take big scoops and shovels and that deteriorates the coal more.

BY MR. FRAWLEY: And of course some of them are only equipped for box-car loading. They have big expensive box-car loaders. That is true, isn't it?

A At most mines it comes down a chute and those loaders shovel it into the car. Well, unless you have very high sides on gondola cars you just pile it in under the chute and let it go in.

BY COMMISSIONER McLAURIN: Hy-Grade is still operating?

A Oh yes. We started shipping to Ontario the latter part of last week.

BY MR. FRAWLEY: Hy-Grade has had some money from the Emergency Coal Production Board?

A Yes.





Q So has Empire?

A Not since we took it over.

Q You think there is a future for stokers, eh?

A I certainly do.

Q Is your organization going to go into the business of supplying stokers?

A Our organization is very largely a rural set-up and there has not been a type of stoker yet developed suitable for farm use so we leave the stoker business, for the time being at least, to those who are in it.

Q You haven't any competition from oil out in the rural parts, I suppose?

A There is a little; some people in the good times. It is a very nice clean fuel and if the oil were available there is quite a possibility. It wouldn't be extensively used, but to some extent.

Schedule "A"

SASKATCHEWAN FEDERATED CO-OPERATIVES LIMITED

Summary of Fuel Sales

<u>Fiscal year</u> <u>ending</u>		<u>SALES</u>	
Dec. 31	- 1929	\$173,840.28	Coal
"	- 1930	151,147.90	"
"	- 1931	92,895.68	"
"	- 1932	96,167.02	"
"	- 1933	75,576.13	"
"	- 1934	83,392.15	"
"	- 1935	151,517.52	"
"	- 1936	218,275.56	"
"	- 1937	248,759.58	"
Mar. 31	- 1939	403,390.11	Coal & Wood
(15 mos.)			
Mar. 31	- 1940	362,535.75	"
"	- 1941	404,458.67	"
"	- 1942	445,529.57	"



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Robert MacKayFiscal year  
endingS.ALESSchedule "A"  
(Cont'd)

Mar. 31	- 1943	\$555,272.33	Coal & Wood
"	- 1944	562,182.69	"
"	- 1945	608,878.39	"

Schedule "C"

EMPIRE MINE ACCOUNT

East Coulee, Alta.

PROFIT AND LOSS ACCOUNT FOR PERIOD DEC. 1/44 to FEB. 28/45

To Wages	39,533.61	By Sales	62,365.18
To Workmen's Compensation Board	4,659.65	By Misc. Revenue	436.84
To Unemployment Ins.	218.33		
To Wages (Supervision)	2,786.78		
To Maintenance of Eq'p't.	805.02		
To " of Coal Cutting Machines	498.41		
To Timber	2,695.62		
To Oils & Grease	48.17		
To Stable Expense	471.53		
To Power	1,094.40	Lump	Dec. 2322 Jan. 2768 Feb. 2584
To Royalties	986.30		
To Taxes	269.87	Nut &	
To Lease Rentals	107.49	Other	2946 3048 2566
To Demurrage & Switching	16.00		
To Travelling Expense	7.00	Slack	1096 1271 1125
To Stationery, Stamps & Office Supplies	89.12		6364 7087 6275
To Insurance	133.61		
To Cartage	39.75		3.6 3.8 3.8
To Telephone & Telegrams	90.21		tons per man per day.
To Surveys	105.00		
To Misc. General Expense	73.60		
To Interest & Exchange	30.12		3.14 3.19 3.16
To Commissions & Selling Expense	1,291.31		average price per ton realized
To Depletion	1,972.60		
To Depreciation			
No provision yet			
To Operating Profit	4,778.52		
	<u>62,802.02</u>		<u>62,802.02</u>

No provision has been made in the above account for any receipts from Dominion Government subsidies.

An expenditure of \$1,931.89 on Air Slope consisting of

Wages	1,731.64
W. C. Board	190.48
U. E. I.	9.77

1,931.89 has been capitalized.



SASKATCHEWAN FEDERATED CO-OPERATIVES LIMITEDSaskatoon, Sask.

Schedule "D"

List Prices for Coal 1941 - 1945

<u>DRUMHELLER:</u>	<u>1941</u>	<u>1945</u>
<u>Hy-Grade &amp; other similar Drum. Coals</u>		
Lump	4.65	5.15
Egg	3.65	4.15
Nut Pea	1.90	2.15
<u>EMPIRE</u>		
Lump	4.50	5.00
Egg	3.65	4.15
Nut	2.25	2.50
Nut Pea	1.90	2.15
<u>LETHBRIDGE</u>		
<u>Cadillac &amp; other similar Leth. coals</u>		
Lump	5.00	5.50
Egg	3.75	4.00
<u>OTHER ALBERTA FIELDS</u>		
<u>Shoerness &amp; Tofield</u>		
Lump	2.25	2.75
Cobble	2.00	2.50
<u>Greenhill &amp; Bellevue</u>		
Steam	3.07	3.47
Mine Run	3.72	4.12
Furnace Lump	4.72	5.12
<u>Bighorn (Saunders)</u>		
Lump	5.90	6.90
Egg	5.00	5.50
<u>Saskatchewan</u>		
<u>Bienfait Strip Mine</u>		
Lump and Cobble	1.40	1.60
Stove	1.25	1.60
<u>Deep Seam</u>		
Lump and Cobble	1.80	2.25
Stove	1.60	1.70





SASKATCHEWAN FEDERATED CO-OPERATIVES LTD.

Schedule "B"

COAL SHIPMENTS - CARS

1941 - 42

	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
													96936796
1941 - 42													
Drumheller	11	14	23	231	359	340	273	140	226	135	51	1803	77.3
Lethbridge	1	3	6	38	77	48	37	20	34	10	8	282	12.1
Other Alberta fields	1	4	7	13	18	5	2	7	2			59	2.5
Saskatchewan	1			3	10	50	55	41	12	10	7	189	8.1
	13	18	33	279	459	456	370	203	279	157	66	2333	

1942 - 1943

Drumheller	58	32	146	257	273	247	277	257	284	250	237	250	2568	78.6
Lethbridge	9	8	17	52	39	30	47	44	44	54	43	16	403	12.4
Other Alberta fields	1	1	3	20	16	16	13	14	9	15	11	5	124	3.8
Saskatchewan	3	2	3	12	14	17	13	33	31	26	13	4	171	5.2
	71	43	169	341	342	310	350	348	368	345	304	275	3266	

1943 - 1944

Drumheller	76	124	223	173	249	261	235	163	240	206	159	96	2205	76.4
Lethbridge	13	10	15	20	17	20	17	21	28	18	11	9	199	6.9
Other Alberta fields	5	5	16	10	6	17	14	26	55	23	10	4	191	6.6
Saskatchewan	5	6	14	22	18	26	56	87	42	3	5	6	290	10.1
	99	145	268	225	290	324	322	297	365	250	185	115	2885	

1944 - 1945

Drumheller	101	131	210	174	228	195	209	208	236	274	247	147	2360	79.1
Lethbridge	5	14	16	21	30	17	17	16	21	25	20	14	216	7.2
Other Alberta fields	3	3	7	11	7	13	37	43	36	19	7	2	188	6.3
Saskatchewan	5			5	9	17	44	70	24	27	14	5	220	7.4
	114	148	233	211	274	242	307	337	317	345	288	168	2984	

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[illegible]

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BY MR. FRAWLEY: Mr. MacPherson will present a brief on behalf of the Regina Coal Dealers' Association.

MURDO MACPHERSON: This is being presented on behalf of the Regina Fuel Dealers' Association. They are the people who actually get the coal to the consumer in the city of Regina.

Exhibit 146 - Submission of Regina Fuel Dealers' Association

MR. MACPHERSON proceeds to read Exhibit 146:

This brief is presented on behalf of the Regina Fuel Dealers' Association. In the very nature of things this submission may not contribute much to a solution of the problems you are called upon to deal with from the national standpoint, but in a desire to be helpful and in the light of their experience they wish to present this statement of fact and of their views to you. The Association consists of twenty dealers out of a total of thirty-four dealers in the City of Regina. Generally speaking, they have no large number of employees individually. The total number of employees engaged by them is 175. The Association exists as an Association for the purpose of providing uniformity in the handling of coal by retail in the city, in endeavoring to establish a proper standard of business ethics and dealing as between the merchant and his customer and as between merchant and merchant. There has been a successful effort to establish uniformity of price on a basis that is not unfair to the consumer and to indicate how this is arrived at, we might point out, for instance, one brand of coal - Manitoba and Saskatchewan cobble lignite. The cost to the dealer of this coal is \$2.25 a ton. To this he adds \$1.90, the cost of freight. He adds 20% of this total, \$4.15 or 83¢, as a reasonable profit, adds an allowance of 25¢ for degradation, 85¢ for cartage and 22¢ for unloading, arriving at a price of \$6.30 which is the cost to the consumer in Regina.

BY MR. FRAWLEY: Perhaps I might interrupt you a moment, Mr. MacPherson. This brief just filed, 145, shows Bienfait





strip mine, lump and cobble, 1941 price \$1.40, 1945 price \$1.60. Oh, here, Deep Seam, \$2.25.

MR. MACPHERSON: Yes, you see M. & S. is Deep Seam, not strip mine. (Continues brief):

Other coals are sold on the same basis of price.

In Regina the consumers use Drumheller coal to the extent of about 50% of our demands, Saskatchewan lignite to the extent of about 20% and other Alberta coals, steam and otherwise such as Lethbridge, Saunders Creek, to the extent of 30%. The amount of Saskatchewan lignite used is lower now than it had been some years ago. It is felt that it was as high as 30% at the peak. It is used mainly in apartment blocks and business buildings and its use there has not fallen off to the extent that it has for domestic use. There are many reasons why the domestic user at the moment is using other coals than Saskatchewan lignite. For instance, they are easier to get in in the summertime. They are easier coals to handle and in its very nature Saskatchewan lignite is not a storing coal. While other coals can be put in at any date in the early summer, the consumer does not want to put in lignite before September 15th. In Regina, wood is not a great factor as a fuel. For domestic purposes there is a demand in the late spring and early fall but by and large it does not represent any great quantity of fuel actually consumed. There is no natural gas and no manufactured gas which competes as a fuel with coal in Regina. There have been various contracts entered into from time to time for natural gas for the City of Regina but there has never been any ability to deliver gas as there is no gas field within reasonable reach of the city. Again while there have been from time to time suggestions for establishing manufacturing gas plants, it has never reached the stage where any plant was established. The chief competition in the matter of fuel comes from oil. At the moment it is not felt that more than 1% of fuel in Regina is oil,



but this Association feels that post war there will be a very definite and serious competition from oil to coal in this city. Practically all our coal comes to Regina by rail. Before the war a considerable quantity was trucked here from the lignite field, but actually the percentage of coal trucked was always low. In the city to the consumer coal is delivered by truck and approximately eight trucks are used for this purpose. There are still a few teams but almost entirely the work is done by trucks.

The experience of the fuel merchants of Regina is that ordinarily in peacetime consumers do not put their coal in until after the 15th of August. Before that date they only ordered such coal as was necessary for their current requirements. Answering the call of the Fuel Director, there has been very reasonable response, but at that during the war years not more than 30% of the coal used was delivered from the end of the winter to the 15th of August. The Regina fuel merchants serve the City of Regina and adjoining urban communities such as North Regina and Eastern Annex and a very limited number of farmers. All the coal used is Canadian coal. The use of anthracite in Regina is negligible and as already stated, wood is not a competitor to coal. Post war there will undoubtedly be a swing to oil. For the information of your Commission, we might say that the big seller in Regina is Drumheller coal. Without entering into a consideration of the merits and demerits of this coal and other coals we might say that probably one reason for its popularity is that anybody can fire it. We should add that briquettes are becoming increasingly popular.

Ordinarily in peacetime the dealers have not much complaint with the mines. Their chief complaint is in respect to "distress" coal, which in peacetime is brought in. This represents coal which is shipped to a wholesaler's agent in Regina on speculation and not to any dealer. In the main the





result is that there is immediately a price-cutting situation and so far as the consumer is concerned, he is exposed to inferior service and inferior coal at times. This shipping of "distress" coal should be prohibited. The dealers in peacetime experience no difficulty in the grading of coal, but have experienced considerable difficulty in grading of coal during war. They realize this results from perhaps war conditions but in the end it means so far as they are concerned that they must take all the blame and make adjustments with their customers. In peacetime the coal as received is good coal, well graded, but in wartime the coal as delivered too often contains everything that comes up from the mine.

This Association feels that there must be a measure of regulation of the action of coal dealers, that they should be licensed as they are in Regina, and that there should be in addition some means of disciplining dealers who are guilty of unfair practices not only toward one another, but particularly towards the consumer, the public. This Association believes that there should be some investigation from the standpoint of coal as a fuel as to whether the competition from oil is fair having regard to the fact that in many instances as a by-product it is "dumped" on the market as against coal.

In the matter of wartime restrictions, the dealers have found that the regulation in respect to credit is most desirable and they feel that by means of this regulation many of the dealers have been able to keep in business. In peacetime they do not believe that there can be to the same degree the orderly delivery of coal as has been sought during the war. They suggest that if the mines and the railways could get together . . .

MR. MACPHERSON: That is something of the same idea as Mr. MacKay had, although we did not confer on it.

BY COMMISSIONER McLAURIN: It is something to get the mines and the railways together. The railways and the mine operators are like Kilkenny cats.





MR. MACPHERSON: I believe back in 1921 something was done in this connection. I don't think it was followed up or worked out, but I believe there was something back in '21. (Continues brief):

. . . and if there was a small reduction in the price of coal and freight rates. . .

BY MR. FRAWLEY: Are you really telling us that the railways actually forewent some of their rates?

MR. MACPHERSON: Well, those are my instructions. I think it is worth while following up. I hadn't an opportunity of getting the year and date and circumstances to present to the Commission. I will endeavor to get that and follow it up.

BY MR. FRAWLEY: You give me chapter and verse and I will take it down to Montreal.

MR. MACPHERSON continues brief:

. . . . so that in turn the dealer might pass this reduction on to the consumer, that there might be here a measure of summer delivery. From the nature of our Western coal our dealer himself cannot store coal in quantity. He must move his coal out as it comes in. To indicate what is meant in this connection, one dealer last spring put in 400 tons of Drumheller lump in sheds where the temperature ranges from 50 to 90 in the summer months. In the fall he was only able to take out 150 tons lump, the balance was stove nut and slack. The loss consequently was his own.

The dealers believe that the wartime uniformity of sizing should be maintained. This was instituted at the mine head by the Wartime Prices and Trade Board and the dealers believe this is in the interests of all concerned.

By way of recommendation to the Commission the dealers in Regina wish to point out to the Commission that post war they feel there will be a tremendous increase in the matter of automatic equipment and they believe more should be done by



way of research to establish the best method of utilization of Western coals by mechanical equipment. Having regard to their considered judgment that automatic equipment will increase post war, they feel that Western coal operators must give consideration ultimately to the crushing of coal before it is delivered to the dealers to provide sufficient coal of a type needed where automatic equipment is used. This in itself will tend to even off price. While automatic equipment will increase particularly in larger buildings, proportionately there will be an increase in homes as well. They believe that serious consideration should be given to the processing of Western coal in a measure that has not as yet been done. They point out that with our Western coals there is shrinkage and depreciation if stored. This applies particularly to lignite. Briquettes, as has been indicated already, are increasing in popularity and if there were more briquettes used, the dealers would be at less expense in the matter of providing buildings and could consequently pass on to the consumer any reduction in cost. If the coal were processed, then open bins would serve instead of expensive buildings, taxes would be lower and generally the consumer would benefit.

The Fuel Dealers' Association as such does not feel that it is in a position to offer any recommendations to your Commission on such issues as the present trade or tariff structure or on such issues as how best to provide a market for Canadian coal. The fact is that nothing but Canadian coal, excepting a small amount of anthracite, is used in this city. We felt, however, it would be of interest to you and might be helpful to you to know some of the difficulties, some of the problems and to have some of the suggestions we might be able to make to you in the light of our experience covering a great number of years in the actual delivery of coal to the consumer, and indicating to you something of the consumer's taste in fuel and something of the trend having





regard to the future.

All of which is respectfully submitted.

BY MR. FRAWLEY: I suppose that 1% of fuel oil today in Regina, that is a wartime situation?

A Yes, as a matter of fact it is a wartime situation. Oil was just becoming a competitor when the war broke out but the fuel dealers realize that oil is liable in a very real way to be a competitor post war.

Q Yes, because you are right here in what is called a refinery area--two large refineries in Regina and one in Moose Jaw. You would have a duplication of what happened in Vancouver.

A We would have; we expect that.

Q That is the only song they sing, the evils of fuel oil competition.

A Mr. Treadwell and Mr. Drury, two of the dealers, are here and if there is anything you would like to ask them?

Q I would like to ask them something about their relationship with operators. Are they simon-pure dealers or are some of them adjuncts of operators?

A All simon-pure dealers.

Q If they would like to furnish this--it could be done in confidence; it has been done--we would like to have their spreads.

A We have given it to you.

Q That is just one?

A That is typical. We have taken the one coal, and we apply the same formula.

Q That is as I recall it just your lignite?

A Yes, but I have it too that other coals are sold on the same basis of price.

Q Apparently the co-operative spread is \$1.00.

BY COMMISSIONER McLURIN: You are not comparing like things. The co-operatives sell to the country. They are right out of the urban.



BY MR. FRAWLEY: That's right. Where is this reference to your spread, Mr. MacPherson?

MR. MACPHERSON: On the first page.

Q There is a total spread of \$4.05 a ton? He takes out freight \$1.90. How is that \$2.05 left now?

A That \$2.05 covers degradation, unloading, cartage, delivery right to the bin in the home.

Q Now the things that the rural retailer out in the country would have would be degradation?

A He might not have cartage. He might take delivery himself from the car.

Q He might have some unloading?

A He might. On the other hand he may deliver right from the car. A lot of them take it from the car.

Q And 83¢ your clients say is their profit and that that is fair and reasonable?

A Yes.

Q And there are no tie-ups at all with the operators?

A I am sure there are no tie-ups.

BY MR. FRAWLEY: Mr. Yeo will submit the brief on behalf of the Moose Jaw Co-operative Association Limited.

Exhibit 147 - Submission on behalf of Moose Jaw Co-operative Association Ltd.

H. C. YEO proceeds to read Exhibit 147:

We are pleased to submit the following brief to your Commission and trust that the information contained therein may be of value to you.

The present Moose Jaw Co-operative Association Limited was formed in June 1944, as the result of amalgamating two Co-ops, with a long record of giving good service to their members and carrying on successful and sound business, which consequently resulted in considerable savings to members, over the years. The original West End Grocery was formed about 1923 and later became the Moose Jaw Co-op Society formed under



joint stock company act but recognized as Co-op, which in turn amalgamated with Co-op Consumers Association in 1944, to form the present company, under Co-operative Act.

From a very small amount of capital and few members in 1923 our growth has been steady, the present company having assets in excess of one hundred and sixty-eight thousand dollars as at December 31, 1944, and over 2000 members.

Services rendered include, Coal, Wood, Garage, Service Station, Radio Shop, Auto Body Shop, Groceteria, Butcher Shop, Ladies' and Men's Wear, Hardware, Paint, Gas and Oil, and a possible Quick Freeze Locker Plant (if permit is granted). Members are scattered all over the city and far into the surrounding district, about 60% of such members are living in rural areas.

The benefits to be derived from membership in the Association are those of all co-ops, operating under the Rochdale Principle, namely service at cost, the savings being returned to the members in proportion to their purchases.

Since this brief is concerned only with coal we would like to return to that subject. Our yearly sales of coal average approximately seventy thousand dollars, the major portion of which is sold for domestic use. The coals handled include Hy-Grade, Atlas, Murray, Sunshine, Commander, Alexo, Greenhill, Estevan Souris, etc., in various sizes.

(We assume your Commission have all the necessary information regarding origin and analysis of these various coals). With regard to the quality of these various coals we believe it to be somewhat below that of pre-war days in preparation and have had our share of complaints at times, this in turn makes it harder to get people to put in their coal supply early.

Our prices are in line with our competitors of whom there are about twelve in the city, and are briefly as follows:





<u>U Lump</u>	<u>Alexo Stoker</u>	<u>Steam &amp; Industrial</u>
At Mine 4.90	4.25	3.72
Laid down 8.00	8.30	7.12
Delivered 10.30	10.25	8.50
Approximate Yearly 5,000 tons	200 tons	200 tons
<u>Yearly Domestic Tonnage</u>	<u>Souris</u>	<u>Yearly Industrial (tonnage)</u>
7,000 tons	200 tons	400 tons

BY MR. FRAWLEY: This distinction you make, yearly domestic tonnage as against Souris, what do you mean when you use the word "domestic"?

MR. YEO: Well, normally there is so little Souris used.

BY MR. FRAWLEY: This is Alberta then, Alberta domestic?

MR. YEO: Yes. (Continues brief):

All coal is received by rail (C.N. or C.P.R.) and tariff would appear to be rather high, as it may be noted in foregoing prices that cost of freight is almost equal to cost of coal at mine. We deliver all coal by dump truck which avoids breaking coal going to cellar and the cost of delivery is as follows:

Domestic 70 cents

Commerical 50 cents per ton with an additional 20 cents per ton for unloading from car to shed when necessary.

These figures we hope will show the narrow margin in industrial coal. We have found from long experience that the cars which are bought by weight taken on railway scale run on an average about 400 lbs. short to the car when weighed out by us. We have also found by the same experience that the slack content averages about one ton per car. The present market is highly competitive due in part to the number of dealers in the city. Also as there is presently a surplus of Bunker "C" fuel oil in this locality there is lively competition from fuel oil in industrial installation. There appears



to be a gradual trend from lump to stoker fuel with automatic equipment, which tends to lower member savings due to smaller spread in prices of this type of fuel.

Domestic lump is still the popular coal, with Atlas, Murray, By-Grade, Commander and Alexo leading in popularity. As we stated previously we have had some trouble or complaints of more granular and nigger head material and more coal which shatters easily, thus making it more difficult to members to put their coal supply in early.

We have had no more difficulty in obtaining our supply of coal than other dealers, existing conditions we realize make delivery from mine difficult. However we would appreciate being able to obtain somewhat greater supplies in the winter months as coal deteriorates very quickly in sheds in summer, due to excessive heat, and shrinkage involved is enormous.

BY THE CHAIRMAN: Is there much difference between the shrinkage you get in sheds and the shrinkage the consumer would have to take up if he stores it in the summer time?

MR. YEO: The average bin in a house would run from 40 to 55 degrees. The average shed in Moose Jaw might run as high as 105. If you have a good cold cellar, not much air in it, we have customers over there that say they would just as soon put their coal in early as late, providing it is good coal when they put it in. There does seem to be some coal which shatters easily and they claim that that coal when they put it in the bin, no matter how cool the cellar is it does deteriorate. That is why there is an objection to a man putting his coal in early in the spring, that he doesn't get much wastage. Perhaps it is a matter of spending his money before the time comes.  
(Continues brief):

In conclusion we would like to compliment the Controller and his staff on their effort to make the best of a difficult situation, and to suggest that a more equitable method of summer storage of coal be devised. Under the present system





one member puts all his coal in the bin in April to help out a difficult situation, his neighbor buys a ton at a time and is financially the winner, as well as having fresh coal to burn. The situation together with two mild winters has caused many who did put in coal early, to become dissatisfied and they are not anxious to fill their bins this spring. We would like to suggest that these arguments put forward by members in respect to putting in their coal supply early would appear to be well founded and reasonable and would like to recommend that the price of coal to those who put in their supply in the spring and summer be reduced sufficiently to compensate for (1) interest on money used or loaned to put in supply, (2) the ton or two of extra coal required when using summer stored coal to obtain same heat and satisfaction as when using freshly mined coal.

MR. YEO: I think in the average cellar the coal deteriorates enough that you possibly burn one ton more. You have to put a little more draft, use a little more air. I don't think you get quite the efficiency out of it that you do out of fresh coal. (Continues brief):

We must admit frankly that a steady 12 months coal business is desirable and profitable to Government, mine owner, miner, railroad and coal dealer. Also we must recognize the fact that railroads are able to haul more tons per engine in summer than winter, though present tariff is the same. Therefore, we very strongly recommend a special price to the consumer who puts in his supply of coal in the summer, instead of just trying to talk him into putting in his supply as a patriotic or provident act.

BY MR. FRAWLEY: This is the Coal Commission, not the Co-operative Commission, but I wonder if you could tell us whether or not the people who buy coal from you are better off at the end of the year than people that buy from the ordinary coal dealer?

A Yes.



Q To what extent, could you tell us?

A Over the last four or five years an average of 45 cents on every \$10.

Q On coal, or speaking of boots and shoes, generally?

A On coal.

Q Your records show that?

A Yes.

Q This is a city co-operative, is it, rather than country?

A About 60% of rural members. We have paid from 3 to 6% dividend on coal for the last few years. It varies from year to year.

Q You are able to do this on account of service at cost instead of dividends to shareholders?

A We have shareholders, but they are on a different basis.

Q Do you have any people buying coal who do not belong to your co-operative?

A We have people who come in and order a couple of tons of coal. We keep track of their orders, give them an application form. The exception is very rare that they don't become members.

Q But if they don't join the Association what is their position?

A We have not found that situation. We have found that most people are Scotch enough to want to save that 45 cents and are quite anxious to sign that application form.

Q And if they dislike co-operatives in principle they would not come to you at all?

A No. We don't ask people for the price of a share; we let them take their dividends and buy the share out of it. I have a few figures here I didn't have in the brief.

BY COMMISSIONER McLAURIN: Before you leave that, the big percentage of your members live in the rural district adjoining Moose Jaw?

A Yes.

Q And they buy coal from you?



A Not so much; more gas and oil.

Q You have some? How do you make delivery to them?

A We have very little coal outside the city because the local co-ops around in that area buy the coal direct.

Q You say that that 44¢ represents the consumer's saving per ton for an urban operation? It is about 44 cents a ton, say \$10 for a ton of coal, on an urban operation?

A That's right.

Q Your operation is substantially urban?

A In coal, yes.

Q You are not getting part of that saving due to the fact that you have partly a rural operation?

A No, no. If there is too much spread between different departments we pay a dividend on coal itself.

Q Do you try to allocate your expenses and costs between departments?

A Yes.

Q You pretty well know what coal is costing you?

A Yes. We have a few figures to show the change in coal between 1940 and 1944, that is the way people in Moose Jaw, for instance, have been filling up their bins.





COMPARATIVE SALES IN TONS MONTH BY MONTH FOR YEARS 1940 & 1944

MOOSE JAW CO-OPERATIVE ASSOCIATION LTD., MOOSE JAW, SASK.

		Drum- heller Lump	Egg & Stove	Nut	Nut, Pea & Stoker	Slack	Souris Lump
Jan.	1940	863.12	78.01	-	44.67	48.5	96.5
"	1944	190.53	29.24	14.79	70.05	-	19.45
Feb.	1940	637.32	68.8	-	22.18	27.0	83.95
"	1944	296.76	40.84	20.25	47.1	-	24.13
Mar.	1940	500.42	109.6	-	39.51	105.39	44.5
"	1944	393.1	83.25	26.5	59.71	-	20.88
Apr.	1940	172.58	94.16	-	7.58	27.05	23.35
"	1944	142.76	59.63	19.5	63.71	-	3.0
May	1940	12.75	29.65	-	.35	3.88	-
"	1944	129.55	36.45	43.9	38.78	-	-
June	1940	4.73	19.58	-	-	-	1.0
"	1944	159.04	44.78	19.83	29.5	.63	-
July	1940	6.0	8.58	-	1.5	5.28	.63
"	1944	430.38	38.58	15.5	28.85	5.25	-
Aug.	1940	6.55	15.3	-	2.0	29.83	1.25
"	1944	593.5	47.35	28.0	7.2	-	4.0
Sept.	1940	166.92	54.78	-	50.2	7.55	5.0
"	1944	540.58	34.32	18.68	99.65	3.88	-
Oct.	1940	381.56	75.18	-	49.63	19.0	59.85
"	1944	583.03	87.18	21.9	43.4	49.65	34.98
Nov.	1940	809.15	80.18	-	61.4	27.23	88.63
"	1944	585.83	43.7	6.0	13.63	30.38	20.03
Dec.	1940	694.88	49.95	-	30.04	22.03	115.17
"	1944	378.46	76.75	24.55	79.73	-	14.0



COMPARATIVE SALES (Continued)

		Coke	Steam	Alexo & Lump Nordegg	Alexo	Egg & Stoker
Jan.	1940	10.25	33.8	55.36	-	-
"	1944	-	59.5	29.0	2.35	36.7
Feb.	1940	7.9	22.5	18.1	-	-
"	1944	-	8.15	11.8	-	3.59
Mar.	1940	5.72	14.15	18.58	-	-
"	1944	-	8.0	19.0	3.0	-
Apr.	1940	3.4	10.4	4.25	-	-
"	1944	-	1.5	6.38	8.0	-
May	1940	4.34	.65	1.88	-	-
"	1944	-	-	16.0	4.05	29.7
June	1940	4.87	-	-	-	-
"	1944	-	57.03	22.02	-	-
July	1940	-	-	-	-	-
"	1944	-	4.0	52.25	2.0	32.9
Aug.	1940	-	-	-	-	-
"	1944	-	-	2.0	-	67.55
Sept.	1940	-	2.0	3.0	-	30.7
"	1944	-	7.05	-	-	65.13
Oct.	1940	-	5.0	21.4	-	32.95
"	1944	-	6.0	46.75	-	36.60
Nov.	1940	-	6.0	20.7	-	30.7
"	1944	-	6.0	-	-	14.03
Dec.	1940	-	117.88	23.38	-	-
"	1944	-	19.0	17.85	-	14.1





BY MR. FRAWLEY: What coke were you buying?

A I haven't a record of that. That is before my time. It was possibly petroleum coke from Regina.

Q There is a great improvement then in this buying of supplies in the spring and summer?

A Yes, but you never thought of all the talking it took to get that.

Q And it is not good enough yet?

A No.

BY COMMISSIONER McLAURIN: They are scared? Some are scared?

A This year it seems particularly difficult. The first year people were scared; they put their coal in. The next year they put a whole lot in with the result that they didn't get a cold winter and half-way through the next season he was still using it. The man next door started to rub it in and the fellow got sore and you just try to talk him into putting coal in now.

BY COMMISSIONER McLAURIN: The fellow he puts it in now may have the laugh on the fellow next door next fall.

BY MR. FRAWLEY: Are they interested in trying to clear up the situation in the mines?

A Moose Jaw is quite a railroad town. Most folks know how many cars they can haul on a nice warm day in summer and it doesn't seem reasonable to haul at the same tariff 100 cars in summer and 50 or 60 cars in the winter time.

Q Now you are into the freight rate structure. Does it appeal to the consumer in Moose Jaw that putting the coal in just in the burning season makes for slack time in the summer?

A Yes, they are interested in labour there, being Union men.

BY MR. FRAWLEY: Mr. Turner will present a brief on behalf of several operators in the Bienfait-Destevan district.



Exhibit 148 - Brief of Eastern Collieries  
of Bienfait Limited, Roche  
Perece Coal Mining Company  
Limited, Manitoba and Saskat-  
chewan Coal Company Limited,  
Western Dominion Coal Mines  
Limited

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MR. A. E. TURNER proceeds to read Exhibit 148:

PRODUCTION

This brief is presented by operators representing more than 90% of the tonnage produced in the Bienfait-Estevan district of Saskatchewan. Coal production in Saskatchewan for the calendar years 1937 to 1944, inclusive, is as follows:

1937	-	1,049,348
1938	-	1,022,166
1939	-	960,000 (Strike)
1940	-	1,097,517
1941	-	1,322,763
1942	-	1,301,116
1943	-	1,665,972
1944	-	1,377,595

It is interesting to note that in 1930, the total output of Saskatchewan was 515,010 tons, thus indicating the increase in importance of the field.

AREA

In outline, the known coal deposit is a kidney shaped area, extending over parts of several townships, namely, Townships 1 and 2 in Range 6, West of the 2nd Meridian, and Townships 1 and 2 in Range 7, West of the 2nd Meridian. The companies presenting this brief center on this area. It does extend considerably to the west, somewhat beyond Estevan, but as it extends, it becomes more broken up and the seam is not continuous, even in the heart of the known area.

TYPE OF COAL

The coal is a lignite, low in the A.S.T.M. scale of classification of coals. Approximately, per lb., it runs from 7,200 to 7,600 B.T.U. and the moisture content ranges from 32% to 36%, with an ash content of from 4% to 8%. Coal is sized according to market demands, and the companies herein represented are completely equipped for this purpose.



MARKET

By reason of the location of the field and the type of coal, our market is limited to freight rates from Bienfait and Estevan of not more than \$2.50 per ton, and somewhat less than this on the west and north, where lower freight rates are in existence on Alberta coals. The geographic location of this field and the ease of extraction are the main reasons that the coal can be mined and sold in competition with other coals. Roughly the area extends from Moose Jaw to Winnipeg, and north of the C.P.R. main line in Manitoba, and within this area Saskatchewan lignite is the most economical coal which can be used particularly with proper equipment. At the present time over 60% of the shipments are to Manitoba and less than 40% to Saskatchewan, and approximately 75% of this is industrial sizes and 25% domestic.

For the past 10 years, more so those preceding the war, the increase in industrial tonnage of Saskatchewan lignite, particularly in the Greater Winnipeg market, has been very marked. Naturally, during the war, inability to secure proper equipment for further conversion to the use of lignite has retarded this trend, but it is anticipated that with more normal conditions, this upward rise in the use of Saskatchewan lignite will continue, because of the economic advantages of using it.

SUBVENTIONS

On page 43, of the Report of the "Royal Commission on the Coal Mining Industry in the Province of Saskatchewan, 1934," the Commissioner, the then Mr. Justice W. F. A. Turgeon, says in referring to subventions - "There seems to me no doubt that this policy of Subventions places Saskatchewan coal at a great disadvantage in the Manitoba market. It bonuses Alberta and British Columbia coal as against Saskatchewan coal." We hereunder quote you the factual history of subventions from 1930:





MILEAGE

Estevan to Winnipeg - 290.6 - Tariff \$2.30 per ton  
 Michel to Winnipeg - 870.8 - " 5.20 " "

S U B V E N T I O N S  
 (Comparative)

			BRITISH COLUMBIA & ALBERTA
			SAKSATCHEWAN
June 13, 1930	P.C. 1399 P.C. 1400	50¢ per ton net	1/8¢ P.T.M. - \$1.09
May 30, 1931	P.C. 1301	1/7¢ P.T.M. 41¢ per ton	
May 30, 1931	P.C. 1303		1/7¢ P.T.M. - 1.24
Apr. 13, 1932	P.C. 953 Supersedes P.C. 1301 P.C. 952 Supersedes P.C. 1303	1/7¢ P.T.M. 40¢ per ton	1/7¢ P.T.M. ..... - 1.20
May 30, 1933	P.C. 1120 Supersedes P.C. 953 P.C. 1121 Supersedes P.C. 952	15¢ per ton net	1/2¢ P.T.M. ..... - .70
May 28, 1934	P.C. 869 Supersedes P.C. 953 & P.C. 1120	35¢ per ton net	1/12¢ P.T.M.- .70
Apr. 5, 1935	P.C. 895 Supersedes P.C. 869 P.C. 894 Supersedes	10% of Tariff 23¢ per ton	10% of Tariff ..... - .52
Calendar Year 1936	P.C. 895 Supersedes P.C. 869	10% of Tariff 23¢ per ton	10% of Tariff ..... - .52
Apr. 5, 1935	P.C. 894 Supersedes P.C. 1121		10% of Tariff ..... - .52
Calendar Year 1937	P.C. 895	10% of Tariff 23¢ per ton	10% of Tariff ..... - .52
Apr. 5, 1935	P.C. 894		10% of Tariff ..... - .52
Calendar Year 1938	P.C. 3972 Supersedes	10% of Tariff 23¢ per ton	10% of Tariff ..... - .52
Apr. 5, 1935	P.C. 895 P.C. 894		10% of Tariff ..... - .52
Dec. 5 1939	P.C. 3972 P.C. 3970	10% of Tariff 23¢ per ton	10% of Tariff ..... - .52



So far as we are concerned, we are not opposed to assistance by the Dominion Government by means of subventions on freight designed to secure new markets, that is, to serve areas not already using Canadian coal, if in their wisdom such a move is decided upon as part of a National Coal Policy for Canada, but we do not believe and the figures support our stand conclusively, that any freight assistance is required on Canadian coals, assuming that present conditions as to price and supply of American coals continue in an area starting at the Manitoba eastern boundary, thence westward to the Rocky Mountains. Our basis for this statement is that any subvention in this area, almost entirely served by Canadian coal, would destroy the geographical location of our field, to its great detriment. Again, in extending subvention assistance for new markets, care must be exercised that this assistance is not used indirectly to destroy our geographical location.

BY MR. FRAWLEY: I looked up your reference to Mr. Justice Turgeon's Report. After saying what you quote him there as saying he says this: "Mr. Brodie seems to be entirely

justified when he states bluntly in his evidence: 'The position as it is today simply means that the government goes into the treasury of the country and hands over to the Alberta fields 70 cents a ton so that they can reduce their price by that much, and then they come here to Saskatchewan and give us 15 cents a ton.'" Now that may be quite true but I don't quite follow it. Certainly no assisted coal comes into Saskatchewan? It goes through, beyond?

MR. TURNER: He was undoubtedly speaking of Manitoba at that time. He meant altering the relative position of the coals in the province of Manitoba.

BY MR. FRAWLEY: "And then they"--meaning the Alberta operators--"come here to Saskatchewan and give us 15 cents a ton"?





MR. TURNER: Yes. It referred to shipments into the province of Manitoba for coal originating in Saskatchewan.

BY MR. FRAWLEY: Oh, "they" doesn't mean the coal operators at all; it means the federal government? Oh well, let me read it again then: "The federal government hands over to the Alberta fields 70 cents a ton so that they can reduce their price by that much, and then the federal government comes here to Saskatchewan and gives us 15 cents a ton."

MR. TURNER: Yes.

BY MR. FRAWLEY: They are both shooting at the Manitoba market or something beyond that?

MR. TURNER: Yes. Our position there is that we don't see the necessity for subventions in that Manitoba market at all, but if subventions are granted we don't want subventions that will in this case reduce the price of Alberta coal 70 cents and ours 15 cents.

BY MR. FRAWLEY: It should only be such a subvention that would enable them to get a market in competition with yourselves?

MR. TURNER: Yes. on the same basis as we were before.

(Continues brief):

TARIFFS:

Inasmuch as little mining machinery is made in Canada, and so far as our field is concerned, little or no use is made of British machinery, it is recommended that mining machinery of a class or kind not manufactured in Canada be admitted duty free.

CONCLUSION

This submission covers only some of the points which affect the operators in the Saskatchewan lignite field. By reason of the fact that the other problems vary with each of the different operations, these will be dealt with in individual submissions.

All of which is respectfully submitted.



BY MR. FRAWLEY: Now you are submitting another brief?

MR. TURNER: Yes, on behalf of the Western Dominion Coal Mines Limited.

Exhibit 149 - Brief on behalf of the Western Dominion Coal Mines Limited, Taylorton, Saskatchewan

BY MR. FRAWLEY: Are you presenting that because you are an officer of that company?

MR. TURNER: I am the secretary-treasurer. There will be another brief presented by our sales agents in Winnipeg which will deal particularly with the marketing and distribution of coal. (Proceeds to read Exhibit 149):

I have pleasure in submitting herewith the brief of Western Dominion Coal Mines Ltd. May I also state that it is the desire of this company to co-operate and assist in every possible way the work of the Commission and we sincerely trust that a way may be found of establishing the industry on a sound and stable basis.

This company operates a mine in the Estevan-Bienfait district, for the production of lignite coal, using both strip and shaft mining methods.

The company was organized in June 1936 to take over the property of a shaft mine then in receivership situate about  $3\frac{1}{2}$  miles from the present operation. It was re-organized in March 1939 and acquired the properties operated by the Truax-Traer Coal Co. Ltd., the Bienfait Mines Ltd., and certain coal rights owned by the Great West Coal Co. Ltd. A new strip mine was then opened up on the present site and the operations which had been in existence at the time of the re-organization were shortly afterwards discontinued. During the fiscal year ended March 31, 1942, to meet the increasing demand for coal brought about by the war, a new shaft mine was opened up on the same site as the strip mine.

BY MR. FRAWLEY: That is with government assistance, I suppose?



MR. TURNER: Yes, on the special depreciation figures.

BY MR. FRAWLEY: I mean did you get a straight loan?

MR. TURNER: No.

BY MR. FRAWLEY: Just the depreciation arrangement?

MR. TURNER: Yes. (Continues brief):

A further increase in productive capacity was obtained during the fiscal year ended March 31, 1944 by the purchase of a 5-yard Walking Dragline and the opening up of new strip pits. As a result of these extensions the mine produced during the fiscal year ended March 31, 1944 approximately 900,000 tons of coal.

BY COMMISSIONER McLAURIN: Is that all strip?

MR. TURNER: No sir, about 700,000 to 200,000. (Continues brief):

This was the year of peak demand.

#### COAL RESOURCES

The company's holdings of coal lands comprise some 6,400 acres located in the Taylorton, Bienfait and Estevan areas. Of the foregoing, approximately 3,000 acres can be worked from the present site. The reserves of mineable coal in this area have been estimated as follows:

Available from Strip Mining -	9,000,000 tons
" " Shaft Mining -	10,000,000 tons

Of the total area of coal lands held by the company, approximately 4,000 acres are subject to royalty and the balance of 2,400 acres is freehold. A map is attached to this brief showing the lands held by the company and the conditions under which they are held. In addition there has been furnished, amongst the information requested by your Secretary, a schedule with legal description of all land held and where applicable, the names of the lessors and particulars of royalties and other payments under the leases. For the further information of the Commission, I have also supplemented this brief by the inclusion therein of a general map of the Souris Valley coalfield. The notations on same





are, however, somewhat out of date.

BY MR. FRAWLEY: Going back to the question of royalty, do you know off-hand approximately how much royalty you would pay for the fiscal year ended March 31, 1944, how much royalty you would pay to the Provincial Crown?

MR. TURNER: I can't answer you off-hand. The statements I have given to the Secretary will show total royalties; they don't break it down as between the Crown . . .

BY MR. FRAWLEY: I just want the Crown.

MR. TURNER: I can get that but I would hesitate to speak off-hand.

BY MR. FRAWLEY: You are not paying as much to the Provincial Crown as to the Canadian Pacific or Hudson's Bay?

MR. TURNER: At times it has been up one way and at times another.

BY MR. FRAWLEY: Depending on the areas you are mining?

MR. TURNER: That's right. (Continues brief):

#### PRODUCTION

The company has produced approximately 3,900,000 tons of coal since the opening up of the operation on the present site in 1939. Of this, approximately 3,200,000 has been obtained by strip mining and the balance of 700,000 tons by shaft or underground mining.

The annual production from the strip mine has varied from a minimum of 385,000 tons during the fiscal year ended March 31, 1940 to a maximum of 686,000 tons during the year ended March 31, 1944. The tonnage for the present year approximates 545,000 tons or a decrease of slightly more than 20 percent from the previous year. Further, decreases are to be anticipated in the post-war period and we estimate an annual tonnage of from 400,000 to 450,000 tons from the strip mine in the period following the conclusion of the European War. Total cost per ton has shown a consistent increase since the commencement of operations and in particular an increase of 13



cents per ton is noted between the years ended March 31, 1944 and March 31, 1945. This latter is undoubtedly accounted for by decrease in volume and changes in wage rates and working conditions. The effect of a further anticipated decrease in tonnage after the conclusion of the war will also be reflected in another increase in the per ton cost. The average sales price per ton has also shown an increase during the period since the commencement of operations. Detailed information in respect to production, costs and average sales price is contained in the schedules requested by your Secretary and these no doubt will be studied by the Commission.

The shaft mine was opened during the fiscal year ended March 31, 1942 primarily for the purpose of obtaining additional tonnage to meet increased demands brought about by the war. In that time it has produced approximately 540,000 tons of coal. It was opened up under extremely difficult operating conditions and the company has incurred substantial losses in the operation of same. Similar schedules to those referred to in the preceding paragraph have been delivered to your secretary, containing detailed information in respect to production, costs and average sales price per ton.

With regard to post-war markets the company would anticipate a total production of from 550,000 to 600,000 tons, of which as stated before some 400,000 to 450,000 tons would be obtained from the strip mine.

BY THE CHAIRMAN: Why do you expect that reduction?

MR. TURNER: Well, it would be an increase over our pre-war tonnage. I think that 600,000 tons would probably represent 33 1/3% increase over our pre-war tonnage and we certainly don't anticipate holding all the tonnage that has arisen through war needs.

BY THE CHAIRMAN: In other words, you don't expect to hold the increase?

MR. TURNER: Well, a great deal of it is directly attributable to war needs.





BY MR. FRAWLEY: It was going straight into Air Force training fields and that sort of thing?

MR. TURNER: Yes. (Continues brief):

The balance of approximately 150,000 tons would be obtained from the shaft mine provided it continues to operate, which is very doubtful on account of the heavy losses. In this event the tonnage will be produced by strip operation.

#### SUBSIDIES

On November 23, 1942 the Emergency Coal Production Board was created by Order-in-Council P.C. 10674. In this order provision was made for the payment of financial assistance to coal mines. The amount of financial assistance varied from time to time, but the provisions existing since April 1, 1944 as applied to this field are covered by Circular No. CC175 of the Emergency Coal Production Board, a copy of which is attached hereto.

No payment has as yet been received by this company in respect of subsidy. Subsidy was, however, claimed based on the operations of the shaft mine for the 6 months ended March 31, 1943. The amount of subsidy claimed for this period was \$30,847.44 and after lengthy correspondence and negotiation the matter is now before the courts for settlement.

BY MR. FRAWLEY: Before the courts?

MR. TURNER: Yes.

BY MR. FRAWLEY: Whom are you suing, the Dominion Crown?

MR. TURNER: Yes.

BY COMMISSIONER McLAURIN: In the Exchequer Court?

MR. TURNER: Yes.

BY MR. FRAWLEY: That is very interesting. All right.

MR. TURNER continues brief:

Application for subsidy at the maximum rate of 25 cents per ton was also made to the Board in respect of the shaft mine for the fiscal year ended March 31, 1945. Although our application was duly approved and the requisite forms filed



to December 31, 1944 no payment has as yet been received.

BY COMMISSIONER McLAURIN: I don't get that. "Application for subsidy at the maximum rate of 25 cents per ton was also made to the Board in respect of the shaft mine for the fiscal year ended March 31, 1945."

A Yes.

Q Well, how could that be approved at December 31, 1944?

A At the commencement of this subsidy period you had to make application for that subsidy and your application was then either turned down or approved, and from then on we furnished quarterly statements showing the result of the operations of that mine for those periods.

Q Well, you may be paid that?

A We may be paid. All I am saying is, we haven't got any yet.

Q But I mean, it takes a little while for them to pay it?

Of course they might be holding it up because you got them in a law-suit.

MR. TURNER continues brief:

#### SUBVENTIONS

Your Secretary, in his memorandum to us, requested certain information in this regard but this request was later cancelled. However, for the information of the Commission it can be stated that subvention on shipments into Manitoba to the east boundary of the province ceased very shortly after war was declared in 1939. There were a few shipments made by the mine during the years 1940 to 1945 to Western Ontario and the rate of subvention allowed was 30 percent of the freight rate with a maximum of \$1.00 per ton.

The company does not oppose subventions or subsidies so long as they do not affect our geographical position in the territory that is naturally captive to this field. It is our opinion that no assistance of any kind is required from the Manitoba east boundary westward, as this territory is inter-competitive practically entirely by Canadian coal producers.



So far as the territory in Central Ontario is concerned, we also wish to point out that an increased volume of tonnage gained by the Western Mines in this area will reflect itself in lower costs to those mines and thereby create a more favorable position for them in the markets which are also served by this field.

BY MR. FRAWLEY: Going back to that earlier paragraph, aren't you threatened with American coal water-borne to the Head of the Lakes?

MR. TURNER: American coal has not been a particular factor in Manitoba for a considerable time.

BY MR. FRAWLEY: Well, from the Manitoba east boundary westward, I see you limit it to that?

MR. TURNER: Yes.

BY MR. FRAWLEY: You don't try to get to Fort William?

MR. TURNER: No. As I said a little earlier, we made a few shipments to Western Ontario in the last few years, probably brought about under exigencies of war.

BY MR. FRAWLEY: Oh, under Coal Control directions?

MR. TURNER: Yes. (Continues brief):

#### WAGE RATES & LABOR RELATIONS

The present wage schedule came into force December 1, 1943 by order of the National War Labour Board, dated January 13, 1944. The schedule provides for a rate of 62 cents per hour for common labor-surface and 65 cents per hour for common labor-underground and the rates range up to a maximum of \$1.10 per hour. The rates in effect at the commencement of the war in September, 1939 were 40 cents per hour for common labor and ranged up to a maximum of \$1.00 per hour.

BY THE CHAIRMAN: Have you any contract miners in your pits?

MR. TURNER: No, we pay entirely on an hourly basis. We have no contract miners.

BY THE CHAIRMAN: I can understand that in your strip mines, of course.

MR. TURNER: Well, both underground and surface. (con-





tinuous brief):

The company's relations with its employees have at all times been maintained on a harmonious basis and no time has been lost since the commencement of the war by reason of strikes of the company's employees.

BY THE CHAIRMAN: Do you think it helps production, a contract minerbasis helps production?

MR. TURNER: Well, there is certainly an argument for it. I mean, you introduce the factor of contract labor based upon the output that they turn out. As a matter of fact, I guess most of them in the field pay on a contract basis, but we ourselves in this mine have been on an hourly basis.

BY MR. FRAWLEY: Oh, I see. That is not a field practice, it is just with your company?

MR. TURNER: Yes.

BY MR. FRAWLEY: By the way, you have no contract with the United Mine Workers?

MR. TURNER: We have a contract with the Saskatchewan Coal Miners Union.

BY MR. FRAWLEY: They have many locals?

MR. TURNER: Just one in the field, at our own mine.

Q Is it what is called a Company Union?

A I have heard that. I have heard a lot of discussion. It is an independent union.

Q And it only operates within the confines of your mine?

A Yes.

Q So ~~that~~ without using the word in any depreciatory sense it is a company union?

A Well, you will have officials of it before you later on and I believe that they will probably tell you the story.

EMPLOYMENT:

Records show an average employment during the fiscal year ended March 31, 1945 of 225 men with a peak of approximately 270. Total number of shifts worked during that period was 58,507 shifts or an average per man of 260 shifts. Similar



figures for the past five years have been submitted in schedule form to your Secretary.

BY COMMISSIONER McLAURIN: What is your production per man-day?

A Of course it differs between the surface and underground.

Q Yes, but what is a typical man-day production?

A We might get 20 with the strip, or something like that.

BY MR. FRAWLEY: How about your shaft mine?

A Oh, it would be half or less.

Q Half or less is pretty high.

BY COMMISSIONER McLAURIN: You wouldn't get 10, would you?

A 7 or 8.

BY MR. FRAWLEY: Over-all?

A All clean commercial coal through the tipple

Q 7 or 8 tons per man per shift?

A As a matter of fact I was preparing figures for submission to the Emergency Coal Production Board, which as you probably know is one of the questions they ask. They were not ready when I left the plant.

Q If you are getting 7 or 8 on an average you must be getting 12, 13, 14 at the face?

A I don't follow.

Q When you say 7 or 8, that is when you dilute it with all of this personnel at the top?

A You mean as related only to the underground miner? I have never drawn it up on that basis but in drawing it up on an over-all basis for the shaft mine I allocated a percentage of the surface employment based upon the tonnage produced by both operations.

Q Oh, stripping and shaft?

A Yes, so we get a little break there.

Q It would be very interesting to know what your producers as against your non-producers, using the Nova Scotian terminology, would take out in your shaft mining.





A I can furnish the information.

Q Because it looks to me like 14 or 15 tons per shift.

A I would hesitate to make any statement that I can't back up but I will submit that to your secretary.

Q You are completely mechanized, I suppose?

A We are. (Continues brief):

#### ABSENTEEISM

A schedule has been prepared and submitted to your Secretary showing a summary of absenteeism at the mine during the winter months of the past two coal seasons. The figures for the period ended February 28, 1945 show that exclusive of Workmen's Compensation the percentage of absenteeism amongst surface workers was 7 percent. On a similar basis the percentage shown amongst the underground workers was 9 percent.

#### TAXATION & OTHER CHARGES

The attention of the Commission is drawn to new provincial legislation already enacted, or in process of enactment, which will result in additional costs to the mining industry. Proposed changes in the Workmen's Compensation Act will result, according to the estimate of the Canadian Manufacturers Association, in an increase of approximately 33 1/3 percent in the rates now in force. The present rate in force with respect to the coal mining industry is 6½ percent and an increase of the percent estimated will amount to \$7,500.00 in the case of this company.

BY MR. FRAWLEY: You are referring to payroll assessments?

MR. TURNER: Yes. (Continues brief):

A Larger School Unit has been created in the area including the mining districts. No mill rate for the new district has as yet been published, but such information as is available indicates an increase of over 100 percent in the present rates, which will represent an increased cost to the company of some \$3,000.00 per annum.

An amendment to the Rural Municipality Act was passed



at the last session of the Provincial Legislature revising the basis of assessment of coal mines. This, we estimate, will also represent an increased cost to the company of approximately \$3,300.00 per annum.

BY MR. FRAWLEY: That goes to the rural municipality in which you are situated?

MR. TURNER: Right.

BY MR. FRAWLEY: You would be the principal taxpayer in that particular rural municipality, I would think?

MR. TURNER: Right. I am merely drawing attention to these facts. These are things which enter into the cost of coal.

BY THE CHAIRMAN: Sure.

MR. TURNER continues brief:

A new act entitled "The Mineral Taxation Act, 1944" is now on the statute books of the Province. Taxation under this act is in two parts, the first part of which is now in force. The amount involved under the first part of the act is not large, but the Commission should study the possible effect of the application of the second part of the act on the mining industry of the province.

#### MARKETING

This company is primarily a producing company, all sales being made through the agency of a sales company. All matters therefore in connection with this phase of the investigation will be dealt with in the brief to be submitted by the sales company.

BY MR. FRAWLEY: What is the name of that company?

MR. TURNER: Great West Coal Company. The brief will be submitted by Mr. J. R. Brodie, I believe. (Continues brief):

#### CONCLUSION

As stated previously in this brief, it appears that the coal industry will be faced with a severe contraction in production in the years following the termination of the war in Europe. To some extent this might be overcome by a





continuation of the efforts towards the installation of improved types of burning equipment, both in the domestic and industrial fields. In addition, the extension of facilities in the field for the carbonizing and briquetting of the raw coal would provide a substantial additional market.

We have already dealt to some extent with the matter of subsidies. Present regulations state that "An operator to be eligible for subsidy must show that he is unable to absorb wage increases and cost-of-living bonus." In our opinion this clause does not operate to the best advantage and we suggest that if the policy of subsidizing mines is to be continued a flat rate of subsidy be applied to all mines within a certain field.

BY THE CHAIRMAN: Hasn't that been done?

MR. TURNER: In effect, but it is subject to the qualification of that clause.

BY MR. FRAWLEY: Before he gets any at all?

A He has got to show that he is unable to absorb it. Of course the cost-of-living bonus is now part of the wage.

Q Then it is tied in strictly to the wage situation?

A Yes.

BY COMMISSIONER McLAURIN: What determines your being in that condition?

A It is the interpretation of the Emergency Coal Production Board.

Q If the sheriff is only at the front gate and hasn't knocked at the door you are not in that condition?

A My argument here is that if the policy is continued it should not be subject to those limits. It should apply to the industry within a field, perhaps separate the different kinds of mining but apply it to that industry in the field. There is no inducement to try and be efficient.

BY MR. FRAWLEY: Isn't it the best thing to not have any subsidies at all?

A Possibly.



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BY COMMISSIONER McLAURIN: That is true but they were in a desperate condition and practically went begging to get the coal out.

BY MR. FRAWLEY: Oh, I don't mean wartime, but in peacetime you don't want subsidies at all?

A I don't think there should be a subsidy during ordinary normal operation periods.

BY COMMISSIONER McLAURIN: There never have been?

A No. Of course there is a necessity now and for a short time in the post-war period, but not in normal operation.

BY MR. FRAWLEY: So all you are speaking of is this war subsidy should be administered on a different basis?

A Yes, or any subsidy should be administered on a different basis. (Concludes brief):

At the present time all mines and in fact all industry are operated under a rigid set of controls. Following the termination of the war, it is to be expected that there will be a gradual relaxation in these controls and the effect of this should be considered.

BY MR. FRAWLEY: If the price ceiling is removed you think you could fight it out for yourselves?

A If the price ceiling were removed it would probably mean inflation or something like that.

Q Oh no, but I mean after the war. You speak about a 13% increase per ton between the years ended March 31, 1944 and March 31, 1945 and you say it was accounted for by decrease in volume and changes in wage rates and working conditions. Didn't you do some development work there?

A Oh well, we are always doing some development work.

Q Particularly in that period did you not do extensive development work?

A This is dealing with the year 1945. At the conclusion of the year, which was last month, we had no abnormal development work of any nature.



Q This is 1944?

A We have no extensive development work.

Q And you definitely are saying to the Commission that you do not regard any development work that you have done during that period as accounting for that increase in cost?

A No, we don't.

Q Tell me this, do you charge development off as an operating cost in the particular year in which it is done or do you amortize it over a period and charge it up against capital?

A If your mine is on an operating basis I would say development should be charged off as incurred, and really in the case of an underground mine you should not try to get too much development ahead of you. In the case of the strip mine our development there of course is stripping alone. If there is any left there at the end of the year it is on the books as an asset.

Q But when you do development you charge it against the year's operations? Is that why you have to sue Mr. Brunning?

A I don't think so.

Q Was that not raised against you as being an unsound accounting practice?

BY COMMISSIONER McLAURIN: Well, if that is not the issue what is the issue?

A Well, possibly we had substantial losses for depreciation, but at the same time we still show operating losses.

Q It is a depreciation issue?

A Yes, that is just the word.

4.30 P.M. - COMMISSION ADJOURNED









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